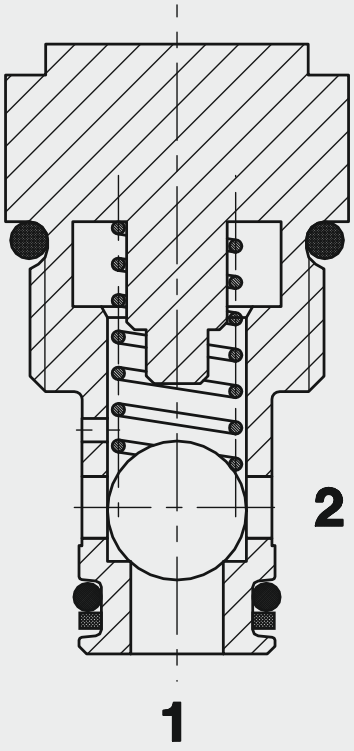
38 l/min
420 bar

Check Valve UNF
Ball Poppet Type, Direct Acting
SAE-08 Cartridge – 420 bar
RV08A-01

FUNCTION



The check valve RV08A-01 is a direct-acting, spring-loaded ball poppet valve. When there is no flow through the valve, the spring holds the ball in the closed position and therefore shuts off port 2 from port 1. The valve opens when the pressure at port 1 is higher than the pressure at port 2, including the pressure created by the spring force.

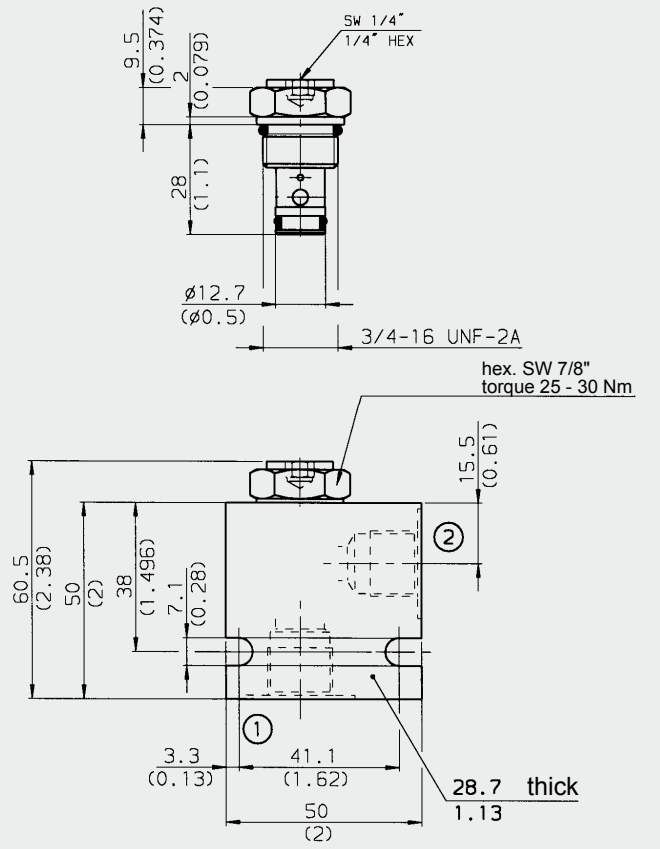
FEATURES

- Main application is to prevent uncontrolled movement or creeping of loaded cylinders and also to shut-off sections of the system
- Excellent stability throughout the entire flow range
- External surfaces zinc-plated and corrosion-proof
- Hardened and ground internal valve components to ensure minimal wear and extended service life
- Low pressure drop due to CFD optimized flow path

SPECIFICATIONS

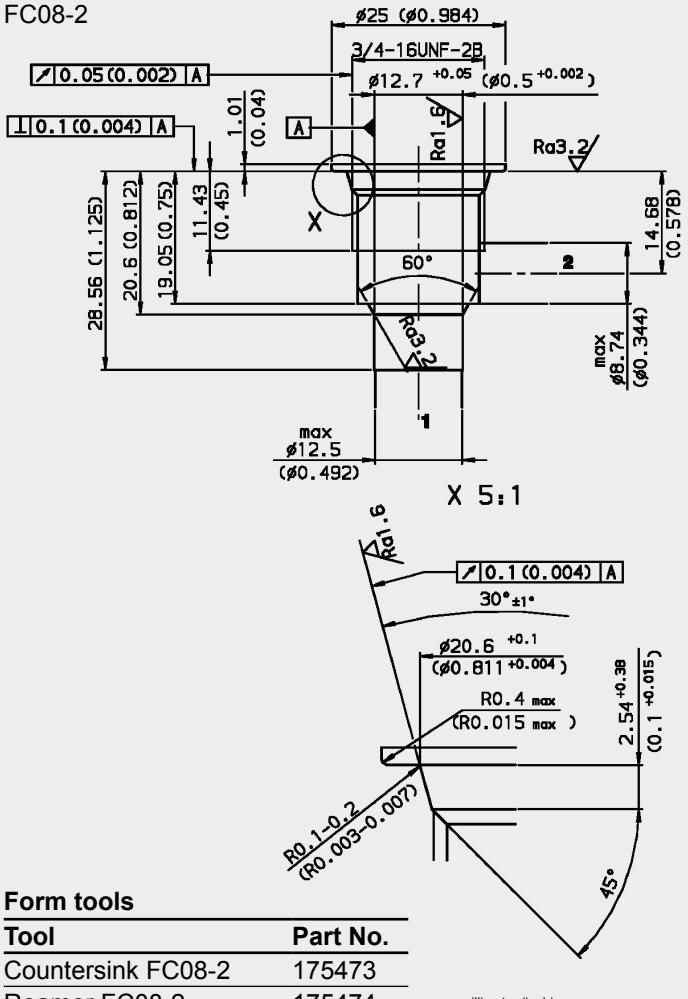
Operating pressure:	max. 420 bar	
Nominal flow:	max. 38 l/min	
Internal leakage:	0.1 cm³/min at 420 bar	
Cracking pressure:	0.35 bar 1.00 bar 2.00 bar 5.00 bar	
Ambient temperature range:	min. -30 °C to max. +100 °C	
Media operating temperature range:	min. -30 °C to max. +100 °C	
Operating fluid:	Hydraulic oil to DIN 51524 Part 1 and 2	
Viscosity range:	min. 7.4 mm²/s to max. 420 mm²/s	
Filtration:	Class 21/19/16 according to ISO 4406 or cleaner	
$MTTF_d$:	150 years (see "Conditions and instructions for valves" in brochure 5.300)	
Installation:	No orientation restrictions	
Materials:	Valve body:	steel
	Ball:	roller bearing steel
	Seals:	NBR (standard) FKM (optional, media temperature range -20 °C to +120 °C)
	Back-up rings:	PTFE
Cavity:	FC08-2	
Weight:	0.06 kg	

DIMENSIONS



CAVITY

FC08-2



Form tools

Tool	Part No.
Countersink FC08-2	175473
Reamer FC08-2	175474

MODEL CODE

RV08A-01 – C – N – 05

Basic model
Check valve UNF

Body and ports*
C = cartridge only
SB3 = G3/8 ports, steel body
AB3 = G3/8 ports, aluminium body

Seals
N = NBR (standard)
V = FKM

Cracking pressure
05 = 0.35 bar (5 PSI)
15 = 1.00 bar (15 PSI)
30 = 2.00 bar (30 PSI)
70 = 5.00 bar (70 PSI)

Standard models

Model code	Part No.
RV08A-01-C-N-05	560084
RV08A-01-C-N-15	560085
RV08A-01-C-N-30	560086
RV08A-01-C-N-70	560087

* Standard in-line bodies

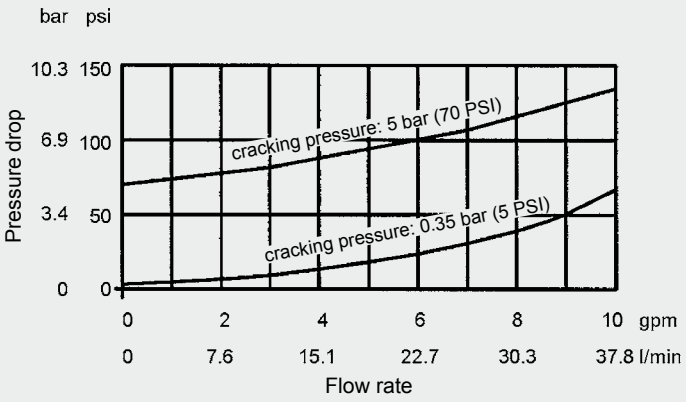
Code	Part No.	Material	Ports	Pressure
FH082-SB3	560919	Steel, zinc-plated	G3/8	420 bar
FH082-AB3	3011423	Aluminium, anodized	G3/8	210 bar

Seal kits

Code	Material	Part No.
FH082-N Seal kit	NBR	3033920
FH082-V Seal kit	FKM	3051756

PERFORMANCE

Measured at ν = 34 mm²/s, T_{oil} = 46 °C



Note

The information in this brochure relates to the operating conditions and applications described. For applications or operating conditions not described, please contact the relevant technical department.
Subject to technical modifications.

HYDAC Fluidtechnik GmbH
Justus-von-Liebig-Str.
D-66280 Sulzbach/Saar
Tel: 0 68 97 /509-01
Fax: 0 68 97 /509-598
E-Mail: flutec@hydac.com