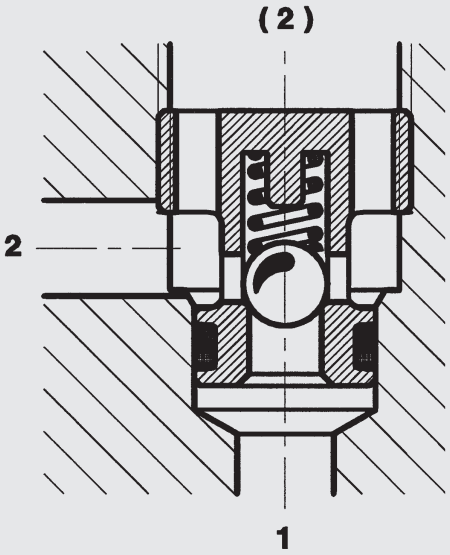
HYDAC INTERNATIONAL

up to 60 l/min
up to 350 bar

Check Valve Direct-Acting Cartridge – 350 bar

RVE-G 1/8 to 1/2

FUNCTION



The RVE is a check valve which allows flow in one direction (port 1 → 2) and shuts off flow in the other direction. The design is a spring-loaded ball with a standard cracking pressure of 0.5 bar.

FEATURES

- Check valves for mounting directly into control blocks
- Both axial and radial flow direction
- Choice of four sizes for optimum adaptability to the system
- Leakage-free poppet design for complete shut-off
- Cracking pressures other than 0.5 bar are available as an option

SPECIFICATIONS*

Operating pressure:	max. 350 bar
Nominal flow:	RVE-G1/8 to max. 10 l/min RVE-G1/4 to max. 10 l/min RVE-G3/8 to max. 30 l/min RVE-G1/2 to max. 60 l/min
Media operating temperature range:	min. -20 °C to max. +120 °C
Ambient temperature range:	min. -20 °C to max. +120 °C
Operating fluid:	Hydraulic oil to DIN 51524 Part 1, 2 and 3
Viscosity range:	min. 2.8 mm²/s to max. 800 mm²/s
Filtration:	Class 21/19/16 according to ISO 4406 or cleaner
$MTTF_d$:	150 - 1200 years, according to DIN EN ISO 13849-1
Installation:	No orientation restrictions
Materials:	Valve body: steel Seals: FKM
Cavity:	04020, 04220, 06320, 08220
Weight:	RVE-G1/8 = 0.003 kg RVE-G1/4 = 0.005 kg RVE-G3/8 = 0.010 kg RVE-G1/2 = 0.024 kg

* see "Conditions and instructions for valves" in brochure 53.000

MODEL CODE

RVE – G1/2 – 01 – V – 0.5

Basic model
Check valve

Size of connection
G1/8 = RVE-G1/8
G1/4 = RVE-G1/4
G3/8 = RVE-G3/8
G1/2 = RVE-G1/2

Type
01 = standard

Seals
V = FKM (Standard)
N = NBR

Cracking pressure
0.5 = 0.5 bar
other cracking pressure on request

Standard models

Model code	Part No.
RVE-G1/8-01-V-0,5	710150
RVE-G1/4-01-V-0,5	710151
RVE-G3/8-01-V-0,5	710152
RVE-G1/2-01-V-0,5	710153

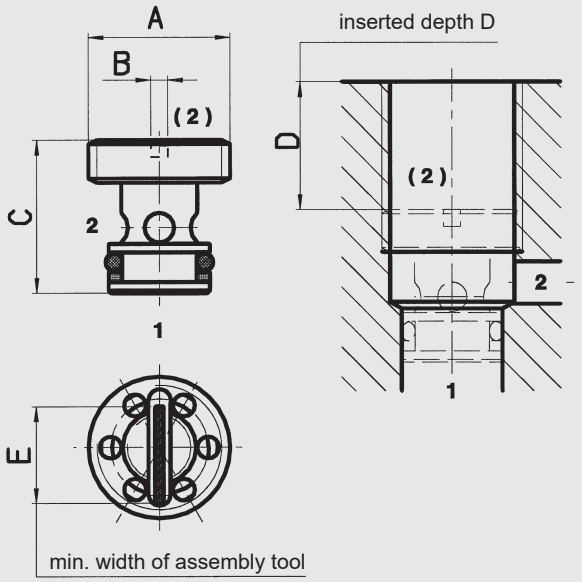
other models on request

Standard in-line bodies
On request

Seal kits

Code	Part No.
Sealkit RVE(S.)-..-Viton	480083

DIMENSIONS



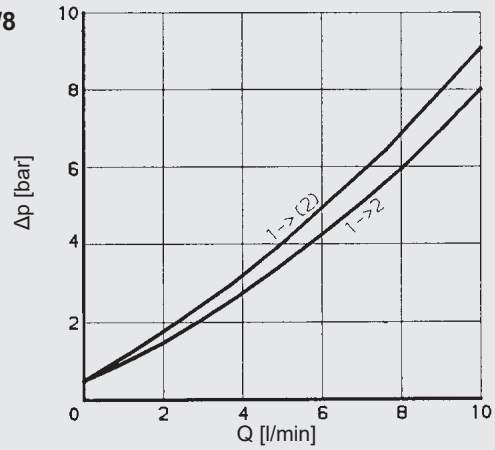
Valves must be screwed in to the inserted depth D (see below) and secured appropriately. Securing by closing screw or calk thread!
If screwed in too far, leaks may occur!

Description	A	B	C	D	E
RVE-G1/8	G1/8"	1.5	13	10	7
RVE-G1/4	G1/4"	1.5	13	14.5	8.5
RVE-G3/8	G3/8"	2	18	15	13.5
RVE-G1/2	G1/2"	2	23	17	12

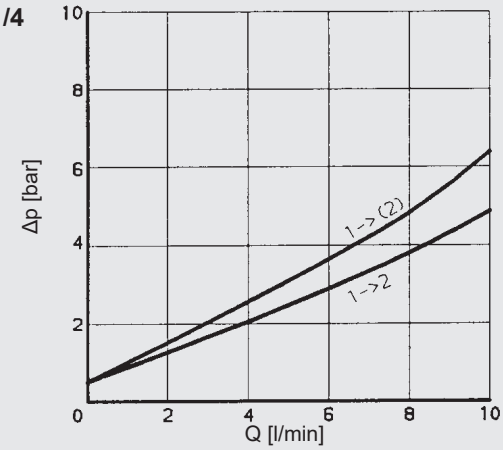
TYPICAL PERFORMANCE

Pressure drops, dependent on flow rate
Measured at v = 34 mm²/s, T_{oil} = 46 °C

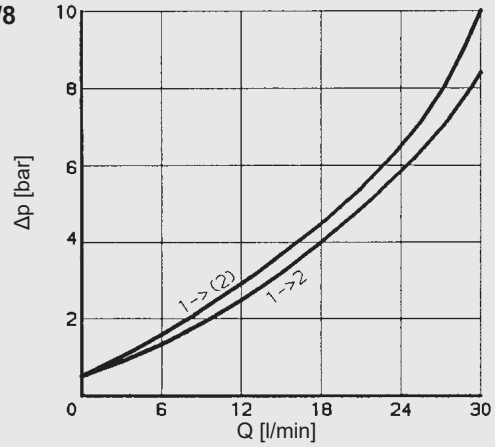
RVE - G1/8



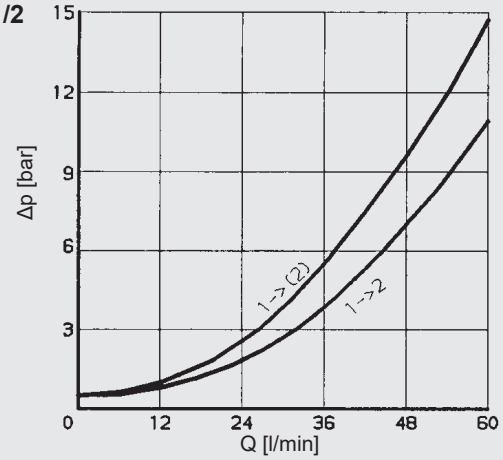
RVE - G1/4



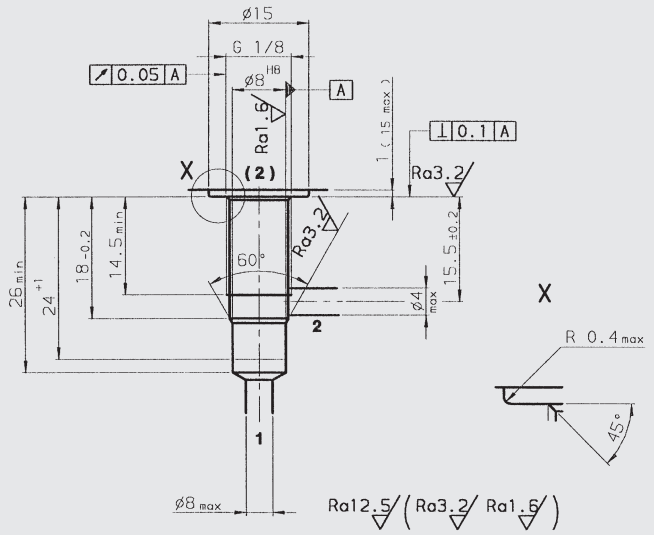
RVE - G3/8



RVE - G1/2

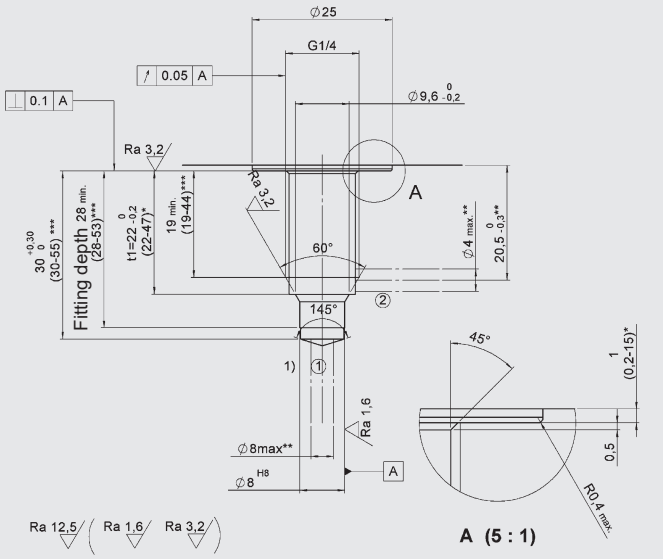


CAVITY
04020 (RVE-G1/8)



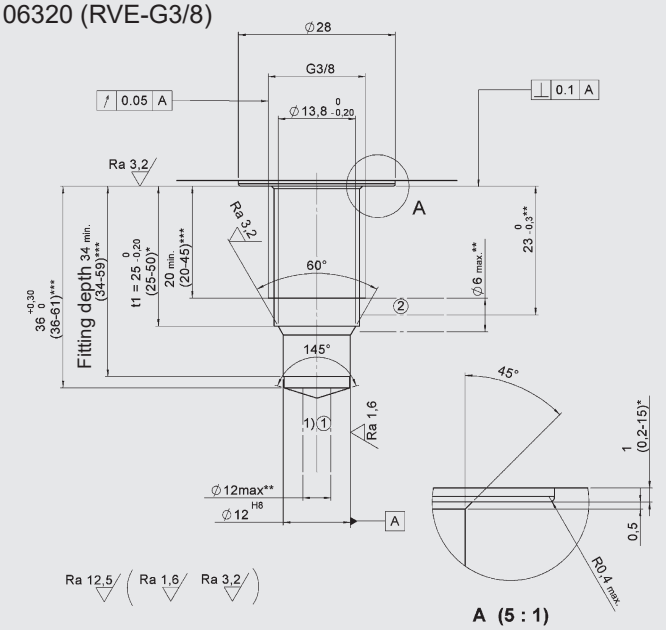
Millimeter
Subject to technical modifications

CAVITY
04220 (RVE-G1/4)



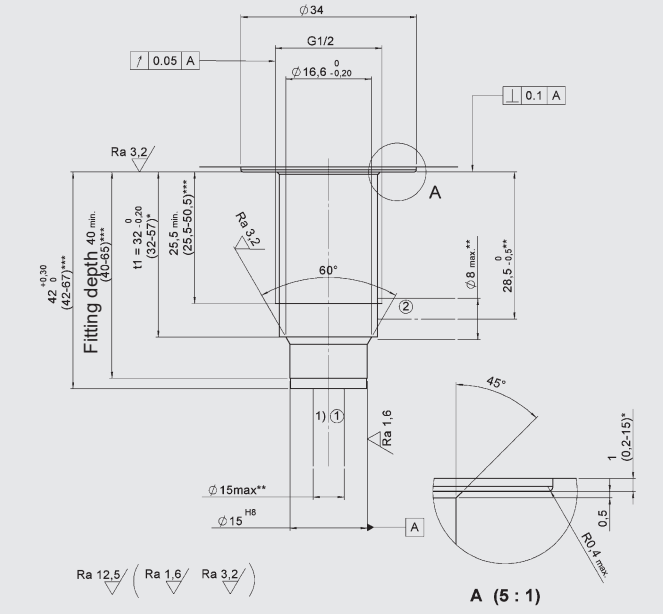
Millimeter
Subject to technical modifications

CAVITY
06320 (RVE-G3/8)



Millimeter
Subject to technical modifications

CAVITY
08220 (RVE-G1/2)



Millimeter
Subject to technical modifications

* specify for flange and manifold construction

** depending on flange and manifold construction

*** dimension is changed by the same value as t1

1) continuing bore 1 can also be excentric

Info:
Cavity G1/4, G3/8 and G1/2 for aluminium processing

Form tools

Tool	Part No./Cavity			
	04020	**04220**	**06320**	**08220**
Countersink MK1	169549	169563	169550	158735
Reamer MK1	1000747	1000747	1014203	1000768
Tap	1002671	1002670	1002668	1002667
Plug gauge	174850	172742	172826	158736

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.

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