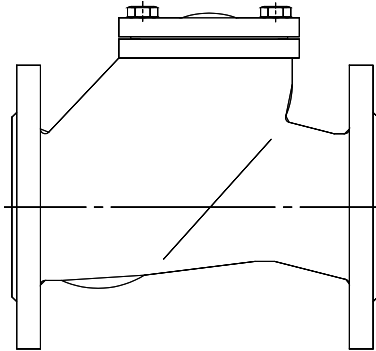


Operating Instructions

Ball Check Valve



- 1 Description of Product and Range of Application
- 2 Performance and Mode of Operation
- 3 Installation into the Pipeline - Mounting
- 4 Maintenance

These operating instructions must always be used in combination with operating instructions BA01E001!

1 Description of Product and Range of Application

Nominal size DN	Nominal pressure PN	Hydrost. test pressure in bars for		Max. admissible working pressure in bars at a working temperature of <60 °C	
		body	seat	Prod. No.	
50-400	10	15	10	10	6460

The Ball check valve is put on for water speeds under stable flow rates according to table:

values acc. EN1074-1: 2000

PFA bar	Velocity of flow m/s
10	3

2 Performance and Mode of Operation

2.1 Installation in horizontal pipeline: Under pressureless conditions, the Ball Check Valve is slightly open. The ball is in its zero position. Under normal operating conditions, the ball is pushed upwards, out of the water passage way, on two rails. The travel of the ball depends on the flow (dynamic pressure). In case of backflow, the ball is pushed from its zero position and pressed onto the seat, thus preventing backflow.

2.2. Installation in vertical pipeline: (flow from below upwards) Under pressureless conditions, the ball is situated in the valve seat. Under normal operating conditions (from below), the ball is pushed upwards, out of the water passage way, on two rails. The travel of the ball depends on the flow (dynamic pressure). In case of backflow, the ball is pressed onto the seat, thus preventing backflow.

2.3 Performance is not ensured when the ball is installed in vertical pipeline with flow direction from above downwards.

3 Installation into the Pipeline - Mounting

Remove all packing material from the valve. Prior to installation, check the pipeline for impurities and foreign matters and clean it if necessary.

Observe direction of installation according to arrow pointing in flow direction!

It is important that all around the valve there is free access for operation and maintenance. For outdoor installation, the customer has to protect the valve against the direct effects of the weather.

During installation of the valve, the distance between the pipe flanges should exceed the valve face-to-face dimension by at least 20 mm so that the raised faces will not be damaged and the gaskets can be inserted. Steel-reinforced rubber seals are recommended for use as flange gaskets (consider resistance to flow medium and temperature).

The mating pipe flanges must be plain-parallel and concentric.

Tighten the connecting bolts evenly (without distortion) and crosswise.

Ball Check Valves should not be installed directly upstream or downstream of pipeline fittings as pipe bends, valves, etc. as the ball can be disturbed by the flow and will thus not or only partially open. There should be a clear pipe cross section of at least 5x DN upstream and downstream of the Ball Check Valve.

4 Maintenance

The Ball Check Valve has to be checked for good performance at least every 12 months. On this occasion, clean the ball from possible deposits.

Operating Instructions for ERHARD Ball Check Valve

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ABCD

QTY.	DESCRIPTION	PART
4	Hexagon bolt	5
1	Cover	4
1	Gasket	3
1	Ball	2
1	Body	1

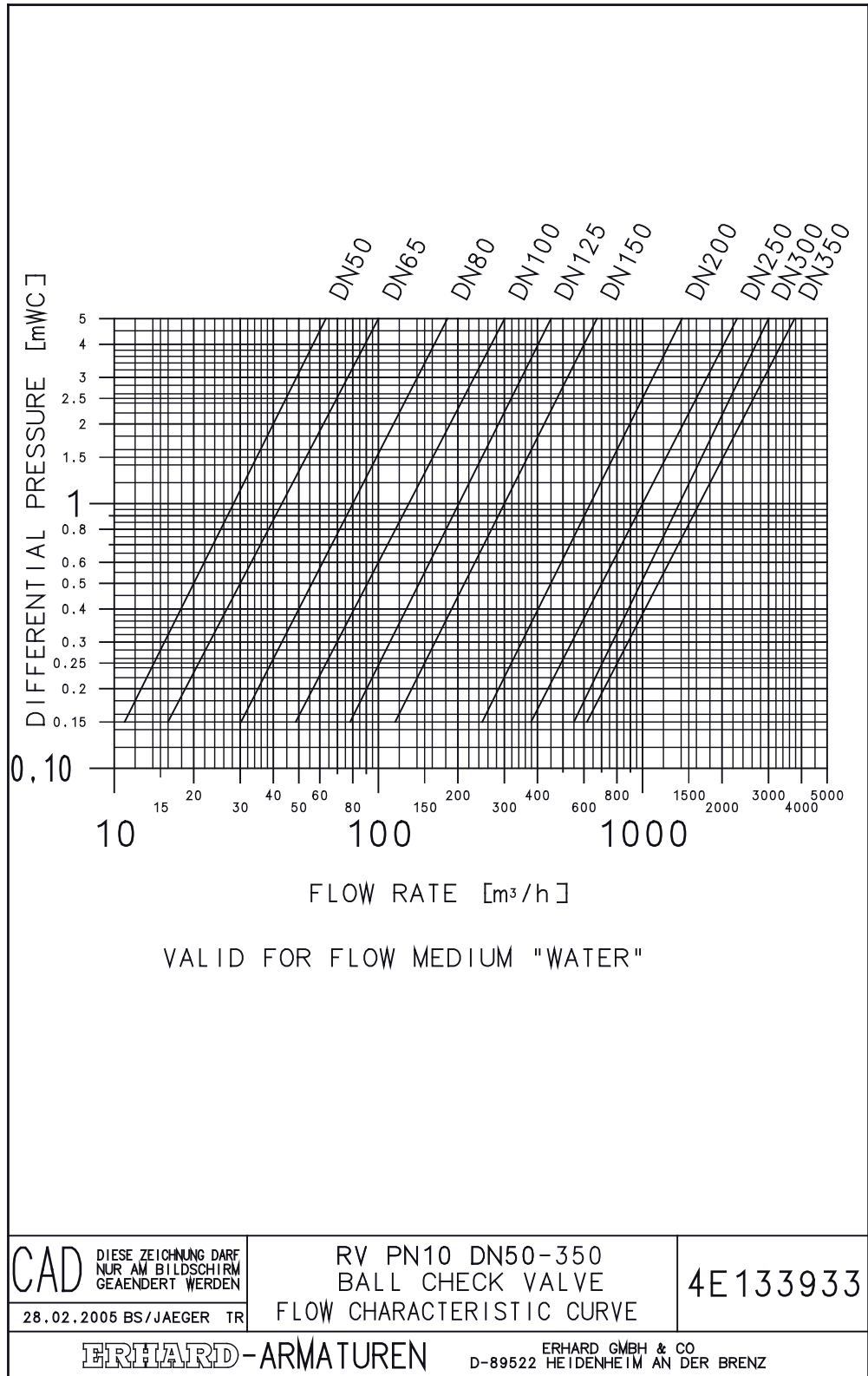
DN	50	65	80	100	125	150	200	250	300	350
D	165	185	200	220	250	285	340	395	445	505
L	200	240	260	300	350	400	500	600	700	850
H	98	118	140	175	205	248	310	400	455	548
B	95	114	128	160	200	230	320	414	460	596
d	62	80	96	122	150	180	246	320	363	420

ABCD

PASSMASS	ABMASSE	ZUST., ANZ.	Tabelle hinzu, Zeichnung überarbeitet	AENDERUNG	12.04.06	GS
ARBEITSPAUSEN		ERHARD-ARMATUREN		ERHARD GMBH & CO HEIDENHEIM AN DER BRENZ		
WERKSTUECKKANTEN NACH DIN 6784		NAME UND ZEICHEN		SCHUTZVERMERK NACH		CAD
OBERFLAECHE NACH DIN ISO 1302 Rg IN µm		2005		DIN 34 BEACHTEN		
ALLGEMEINTOLERANZEN NACH DIN ISO 2768 T, m		GEZ. 01.03.		MIG/JAEGER		MODELL-NR.
BOHRUNGEN: PLUS-TOLERANZ		TR		MİKROFILM DATUM		
WELLEN: MINUS-TOLERANZ		ROHTEIL-ZOHNG.		FERTIGTEIL-ZOHNG.		ZEICHNUNGS-NR.
ALLGEMEINTOLERANZEN FUER FORM UND LAGE NACH DIN ISO 2768 12.		WASS-STAB		BENENNUNG PN10 DN50-350		
TOLERANZKLASSE K		FUER GUSSSTUECKE UND ELASTOMERE ZUSAEZTLICHE ANGABEN		BALL CHECK VALVE		4E135076
WERKSTOFF NACH STUECKLISTE		ERSATZ FUER		URSPRUNG		

123456

Operating Instructions for ERHARD Ball Check Valve



CAD DIESE ZEICHNUNG DARF NUR AM BILDSCHIRM GEAENDERT WERDEN

28.02.2005 BS/JAEGER TR

RV PN10 DN50-350
BALL CHECK VALVE
FLOW CHARACTERISTIC CURVE

4E133933

ERHARD-ARMATUREN

ERHARD GMBH & CO
D-89522 HEIDENHEIM AN DER BRENZ