


2/2-Way Diaphragm Valve, Manually Operated Forged Stainless Steel Body with Sterile Threaded Ends



3233

DN 10 - 50

- ✓ Fully integrated in Burkert's Easy Process Control Systems
- ✓ Hermetical separation of fluids from the operating mechanism by diaphragm
- ✓ Visual position indication
Optionally with locking function (\geq DN15)
- ✓ Various surface finishes
- ✓ Quality certifications FDA / 

3233

The Burkert diaphragm valve systems with forged stainless steel valve bodies are designed for control of ultra-pure, sterile, aggressive or abrasive fluids. They separate hermetically critical fluids from the actuator by chemical neutral high quality diaphragms.

The zero dead volume body, combined with various surface finishes allows a wide range of applications. They offer a range of different materials for the bonnet and the manual actuator.

Technical Data

Connection	• DIN 11851
Medium pressure	0 up to 10 bar
Temperatures	
Medium	-10°C ... +130°C (short +150°C)
Ambient	+5°C ... +140°C
Materials	
Valve body	Forged stainless steel 316L / 1.4435 / BN2 Fe < 0.5% / C ≤ 0.03%
Diaphragm	EPDM, PTFE
Manual Actuator	PPS, Stainless Steel 1.4581
Bonnet	PPS, Stainless Steel 1.4581
Flow direction	Bi-direct

Specifications

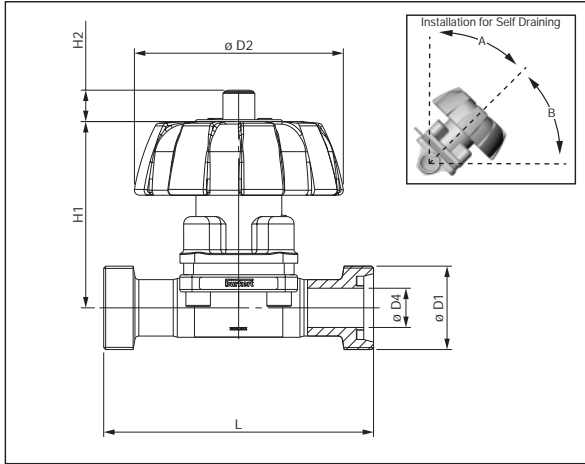
Orifice DN	Kv-Value Water	Weight		
		Manual Actuator / Bonnet		St.St. / St.St. [kg]
[mm]	[m³/h]	PPS / PPS [kg]	PPS / St.St. [kg]	
10.0	1.0	0.3	0.4	0.9
15.0	6.0	0.6	0.7	1.2
20.0	11.0	0.9	1.0	1.8
25.0	16.0	1.6	1.8	2.2
40.0	29.0	3.1	3.4	4.2
50.0	50.0	3.7	4.2	5.2

- Applications:**
- Designed for high quality and purity requirements of:
 - Pharmaceutical industry
 - Biotechnology
 - Semicon
 - Minimum contamination in process systems



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Dimensions [mm]



Self Draining Angles (depending on orifice)

Orifice DN	NPS	Angle -A-	Angle -B-
[mm]	[inch]		
10.0	3/8"	55°	35°
15.0	1/2"	64°	26°
20.0	3/4"	62°	28°
25.0	1"	67°	23°
40.0	1 1/2"	67°	23°
50.0	2"	68°	22°

DIN 11851 Connection

Orifice DN	L	D1	D4	D2	H1	H2
[mm]	[mm]	ø [mm]	ø [mm]	ø [mm]	[mm]	[mm]
10.0	90.0	28x1/8"	10.0	35.0	56.0	-
15.0	110.0	34x1/8"	16.0	80.0	85.0	7.0
20.0	120.0	44x1/6"	20.0	80.0	93.0	11.0
25.0	129.0	52x1/6"	26.0	80.0	94.0	12.0
40.0	160.0	65x1/6"	38.0	114.0	116.0	19.0
50.0	190.0	78x1/6"	50.0	114.0	133.0	25.0

Specifications - Ordering Chart (Other Versions on Request) for DIN 11851 Connection

Orifice DN	Connection D1	Surface finish *1. Standard – Satin finished *2. Electro polished *3. Mech. polished – Satin finished *4. Electro polished *5. Mirror finished	Item-No.										
			Manual Actuator/Bonnet		Manual Actuator/Bonnet		Manual Actuator/Bonnet						
			EPDM Diaphragm	PTFE Diaphragm	EPDM Diaphragm	PTFE Diaphragm	EPDM Diaphragm	PTFE Diaphragm					
[mm]	[mm]	[µm]											
10.0	Rd 28x1/8"	*1. External Ra<6.3 – Internal Ra<0.5	446 122 K	446 152 Z	446 630 C	446 660 J	447 187 N	447 217 T					
10.0	Rd 28x1/8"	*2. External Ra<3.2 – Internal Ra<0.4	446 123 L	446 153 S	446 631 Z	446 661 F	447 188 X	447 218 C					
10.0	Rd 28x1/8"	*3. External Ra<1.6 – Internal Ra<0.5	446 124 M	446 154 T	446 632 S	446 662 G	447 189 Y	447 219 D					
10.0	Rd 28x1/8"	*4. External Ra<0.8 – Internal Ra<0.4	446 125 N	446 155 U	446 633 T	446 663 H	447 190 V	447 220 A					
10.0	Rd 28x1/8"	*5. External Ra<0.25 – Internal Ra<0.25	446 126 P	446 156 V	446 634 U	446 664 A	447 191 J	447 221 X					
15.0	Rd 34x1/8"	*1. External Ra<6.3 – Internal Ra<0.5	446 127 Q	446 157 W	446 635 V	446 665 B	447 192 K	447 222 Y					
15.0	Rd 34x1/8"	*2. External Ra<3.2 – Internal Ra<0.4	446 128 Z	446 158 F	446 636 W	446 666 C	447 193 L	447 223 Z					
15.0	Rd 34x1/8"	*3. External Ra<1.6 – Internal Ra<0.5	446 129 S	446 159 G	446 637 X	446 667 D	447 194 M	447 224 S					
15.0	Rd 34x1/8"	*4. External Ra<0.8 – Internal Ra<0.4	446 130 X	446 160 D	446 638 G	446 668 N	447 195 N	447 225 T					
15.0	Rd 34x1/8"	*5. External Ra<0.25 – Internal Ra<0.25	446 131 L	446 161 S	446 639 H	446 669 P	447 196 P	447 226 U					
20.0	Rd 44x1/6"	*1. External Ra<6.3 – Internal Ra<0.5	446 132 M	446 162 T	446 640 N	446 670 L	447 197 Q	447 227 V					
20.0	Rd 44x1/6"	*2. External Ra<3.2 – Internal Ra<0.4	446 133 N	446 163 U	446 641 B	446 671 H	447 198 Z	447 228 E					
20.0	Rd 44x1/6"	*3. External Ra<1.6 – Internal Ra<0.5	446 134 P	446 164 V	446 642 C	446 672 A	447 199 S	447 229 F					
20.0	Rd 44x1/6"	*4. External Ra<0.8 – Internal Ra<0.4	446 135 Q	446 165 W	446 643 D	446 673 B	447 200 P	447 230 C					
20.0	Rd 44x1/6"	*5. External Ra<0.25 – Internal Ra<0.25	446 136 R	446 166 X	446 644 E	446 674 C	447 201 C	447 231 Z					
25.0	Rd 52x1/6"	*1. External Ra<6.3 – Internal Ra<0.5	446 137 J	446 167 Y	446 645 F	446 675 D	447 202 D	447 232 S					
25.0	Rd 52x1/6"	*2. External Ra<3.2 – Internal Ra<0.4	446 138 T	446 168 H	446 646 G	446 676 E	447 203 E	447 233 T					
25.0	Rd 52x1/6"	*3. External Ra<1.6 – Internal Ra<0.5	446 139 U	446 169 A	446 647 H	446 677 F	447 204 F	447 234 U					
25.0	Rd 52x1/6"	*4. External Ra<0.8 – Internal Ra<0.4	446 140 H	446 170 F	446 648 J	446 678 Q	447 205 G	447 235 V					
25.0	Rd 52x1/6"	*5. External Ra<0.25 – Internal Ra<0.25	446 141 W	446 171 U	446 649 K	446 679 R	447 206 H	447 236 W					
40.0	Rd 65x1/6"	*1. External Ra<6.3 – Internal Ra<0.5	446 142 X	446 172 V	446 650 O	446 680 F	447 207 A	447 237 X					
40.0	Rd 65x1/6"	*2. External Ra<3.2 – Internal Ra<0.4	446 143 Y	446 173 W	446 651 D	446 681 U	447 208 K	447 238 G					
40.0	Rd 65x1/6"	*3. External Ra<1.6 – Internal Ra<0.5	446 144 Z	446 174 X	446 652 E	446 682 V	447 209 L	447 239 H					
40.0	Rd 65x1/6"	*4. External Ra<0.8 – Internal Ra<0.4	446 145 S	446 175 Y	446 653 F	446 683 W	447 210 G	447 240 N					
40.0	Rd 65x1/6"	*5. External Ra<0.25 – Internal Ra<0.25	446 146 T	446 176 Z	446 654 G	446 684 X	447 211 V	447 241 B					
50.0	Rd 78x1/6"	*1. External Ra<6.3 – Internal Ra<0.5	446 147 U	446 177 S	446 655 H	446 685 Y	447 212 W	447 242 C					
50.0	Rd 78x1/6"	*2. External Ra<3.2 – Internal Ra<0.4	446 148 D	446 178 B	446 656 A	446 686 Z	447 213 X	447 243 D					
50.0	Rd 78x1/6"	*3. External Ra<1.6 – Internal Ra<0.5	446 149 E	446 179 C	446 657 B	446 687 S	447 214 Y	447 244 E					
50.0	Rd 78x1/6"	*4. External Ra<0.8 – Internal Ra<0.4	446 150 B	446 180 S	446 658 L	446 688 B	447 215 Z	447 245 F					
50.0	Rd 78x1/6"	*5. External Ra<0.25 – Internal Ra<0.25	446 151 Y	446 181 P	446 659 M	446 689 C	447 216 S	447 246 G					

In case of special application requirements, please consult for advice.

We reserve the right to make technical changes without notice.
105-GB/ 1-0XXX