

## Main applications

Isolation valve for contaminating processes



## Ordering information

**Series 17.4, DN 40–50**  
**Valve with manual actuator**  
 turning handle

DN		Ordering numbers		
mm	inch	ISO-KF	CF-F metric threads	CF-F UNF threads
40	1½	17432-KE01	17432-CE01	17432-UE01
50	2	17434-KE01	on request	on request

with position indicator: 174 . . . E08

**Series 17.4, DN 40–50**  
**Valve with pneumatic actuator**  
 single acting with closing spring (NC)  
 with solenoid valve  
 with position indicator

40	1½	17432-KE41	17432-CE41	17432-UE41
50	2	17434-KE41	on request	on request

without solenoid valve, without position indicator: 174 . . . E11

without solenoid valve, with position indicator: 174 . . . E21

with solenoid valve, without position indicator: 174 . . . E31 (...31/41 specify control voltage)

**Series 17.4, DN 40–50**  
**Valve with pneumatic actuator**  
 double acting  
 with solenoid valve  
 with position indicator

40	1½	17432-KE44	17432-CE44	17432-UE44
50	2	17434-KE44	on request	on request

without solenoid valve, without position indicator: 174 . . . E14

without solenoid valve, with position indicator: 174 . . . E24

with solenoid valve, without position indicator: 174 . . . E34 (...34/44 specify control voltage)

**Series 17.2, DN 63–320**  
**Valve with manual actuator**  
 handwheel

DN		Ordering numbers				
mm	inch	ISO-F	CF-F metric threads	CF-F UNF threads	ASA-LP	JIS
63	2½	17236-PE01	17236-CE01	17236-UE01	17236-TE01	17236-JE01
100	4	17240-PE01	17240-CE01	17240-UE01	17240-TE01	17240-JE01
160	6	17244-PE01	17244-CE01	17244-UE01	17244-TE01	17244-JE01
200	8	17246-PE01	17246-CE01	17246-UE01	17246-TE01	17246-JE01
250	10	on request	on request	on request	on request	on request
320	12	on request	on request	on request	on request	on request

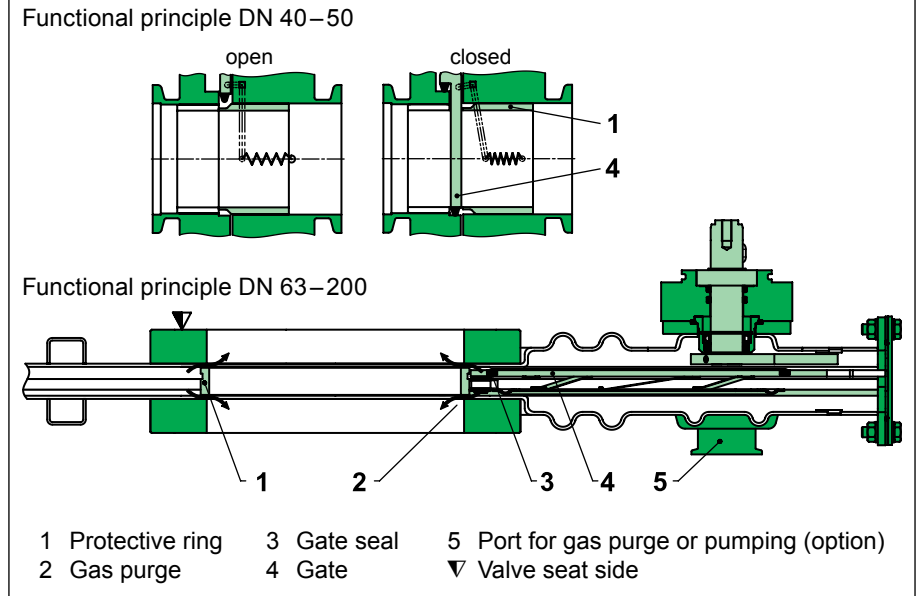
with position indicator: 172 . . . E08

with lever (instead of handwheel): 172 . . . E06

————— Further ordering information on next page —————>

## Features

- Body material: stainless steel
- Long lifetime even under contaminating conditions
- Protective ring
- Easy to service: fast exchange of gate seal



## Technical data

Leak rate: valve body, valve seat	$< 1 \cdot 10^{-9}$ mbar ls <sup>-1</sup>
Pressure range	$1 \cdot 10^{-8}$ mbar to 2 bar (abs)
Differential pressure on the gate	$\leq 2$ bar
Differential pressure at opening	$\leq 30$ mbar
Cycles until first service	
– DN 40– 50	20000
– DN 63–200	100000
Temperature <sup>1)</sup>	
– Valve body	
– DN 40– 50	$\leq 200$ °C
– DN 63–200	$\leq 150$ °C
– Manual actuator	$\leq 80$ °C
– Pneumatic actuator	$\leq 50$ °C
– Solenoid valve	$\leq 50$ °C
– Position indicator	$\leq 80$ °C
Heating and cooling rate	$\leq 50$ °C h <sup>-1</sup>

<sup>1)</sup> Maximum values: depending on operating conditions and sealing materials

Further technical data on next page →

Continued Ordering information

**Series 17.2, DN 63–320**  
**Valve with pneumatic actuator**  
 double acting  
 with solenoid valve  
 with position indicator

DN		Ordering numbers (specify control voltage)				
mm	inch	ISO-F	CF-F metric threads	CF-F UNF threads	ASA-LP	JIS
63	2 ½	17236-PE44	17236-CE44	17236-UE44	17236-TE44	17236-JE44
100	4	17240-PE44	17240-CE44	17240-UE44	17240-TE44	17240-JE44
160	6	17244-PE44	17244-CE44	17244-UE44	17244-TE44	17244-JE44
200	8	17246-PE44	17246-CE44	17246-UE44	17246-TE44	17246-JE44
250	10	on request	on request	on request	on request	on request
320	12	on request	on request	on request	on request	on request

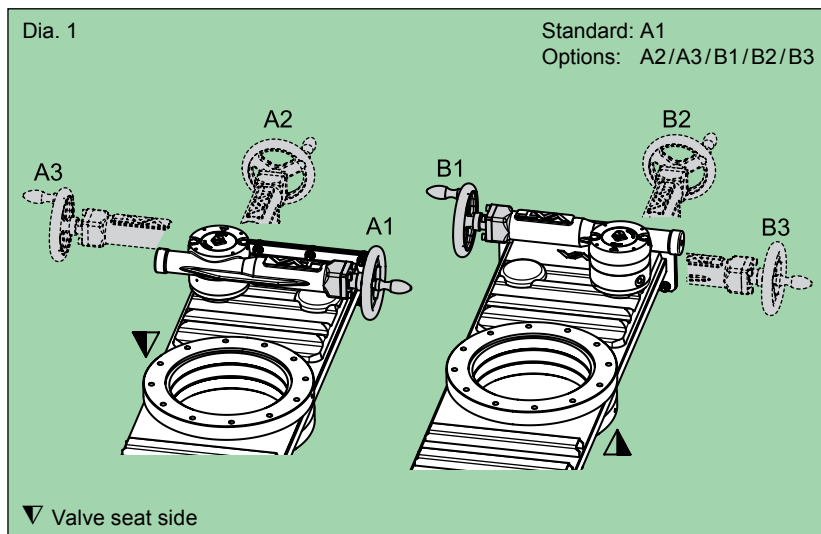
without solenoid valve, without position indicator: 172 . . . E14  
 without solenoid valve, with position indicator: 172 . . . E24  
 with solenoid valve, without position indicator: 172 . . . E34 (specify control voltage)

Continued Technical data

<b>Material</b>	
- Valve body, flange	AISI 304 (1.4301), AISI 316L (1.4435)
- Mechanism (main components)	AISI 304 (1.4301), AISI 316L (1.4404)
<b>Seal</b>	
- Bonnet	metal
- DN 40– 50	FKM (Viton®)
- DN 63–200	FKM (Viton®)
- Gate	
<b>Feedthrough</b>	
- DN 40– 50	bellows
- DN 63–200	rotary feedthrough with intermediate pumping
<b>Mounting position</b>	any
<b>Solenoid valve</b>	24VDC, 2.5W (others on request)
<b>Position indicator: contact rating</b>	
- Voltage	≤250 VAC    ≤50 VAC/DC
- Current	≤2A            ≤3A
<b>Valve position indication</b>	visual (mechanical)

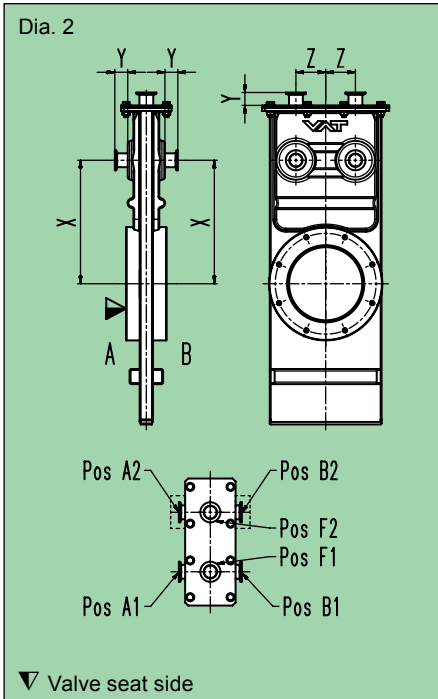
DN (nominal I. D.)		Standard flanges	Conductance (molecular flow) (depending on A-dimension and flange type)	Valve with manual actuator						Valve with pneumatic actuator						
				Weight with turning handle		Weight with handwheel		Weight with lever		Compressed air min. – max. overpressure		Volume of pneumatic actuator		Closing or opening time		Weight
mm	inch		ls <sup>-1</sup>	kg	lbs	kg	lbs	kg	lbs	bar	psi	l	ft <sup>3</sup>	s	kg	lbs
40	1½	See pages 96–97	80	2.3	5.1	–	–	–	–	5–7	73–102	0.06	0.002	1	3	6.6
50	2		80	2.5	5.5	–	–	–	–	5–7	73–102	0.06	0.002	1	3.1	6.8
63	2½		435	–	–	11	24	9	20	4–7	58–102	0.13	0.005	1.5	11	24
100	4		1740	–	–	17	38	15	33	4–7	58–102	0.13	0.005	1.5	17	38
160	6		5 145	–	–	30	66	28	62	4–7	58–102	0.28	0.01	2.5	31	68
200	8		12200	–	–	39	86	37	82	4–7	58–102	0.28	0.01	2.5	39	86

## Options



### Actuator

- Solenoid valve for impulse actuation:  
last valve position is maintained at power failure
- Solenoid valve separate, for external mounting
- Other solenoid valve voltage  
(standard: 24 VDC)
- Pneumatic actuator of DN 63–200  
mountable in 6 positions (Dia. 1):
  - position A1, A2, A3 on A-side  
(valve seat side): to be specified with order
  - position B1, B2, B3 on B-side  
(rear side): to be specified with order
- Double position indicator  
(2 switches each for the positions «open» and «closed»)



**Valve**

- Customer specified flanges with/without watercooling
- For direct mounting to flat chamber: special flange for mounting to chamber wall, standard flange on opposite side
- Heat-resistant mechanism
- Ports for roughing (by-pass), venting or for gauges (Dia. 2)
  - DN 63–200: possible in positions A1, A2, B1, B2, F1 and F2
  - DN 40– 50: positions on request

DN valve	mm	40	50	63	100	160	200
	inch	1½	2	2½	4	6	8
Recommended port ISO-KF oder CF-F	mm	VCR	VCR	16	40	40	40
	inch	¼	¼	⅝	1½	1½	1½
X	mm	45	45	146	185	245	304.40
	inch	1.77	1.77	5.75	7.28	9.65	11.98
Y	mm	79.50	79.50	20	20	20	20
	inch	3.13	3.13	0.79	0.79	0.79	0.79
Z	mm	–	–	30	47.50	59	85
	inch	–	–	1.18	1.87	2.32	3.35
Other ports on request							

**Ordering information for options:**

Ordering No. of valve-X (e. g. 17246-PE44-X, X = port ISO-KF 40 in position F2)

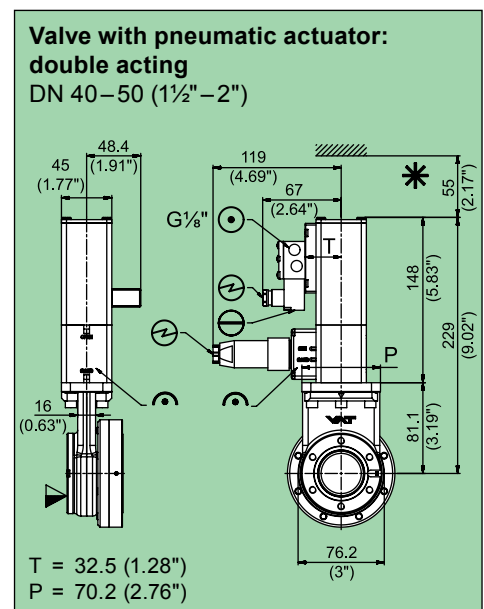
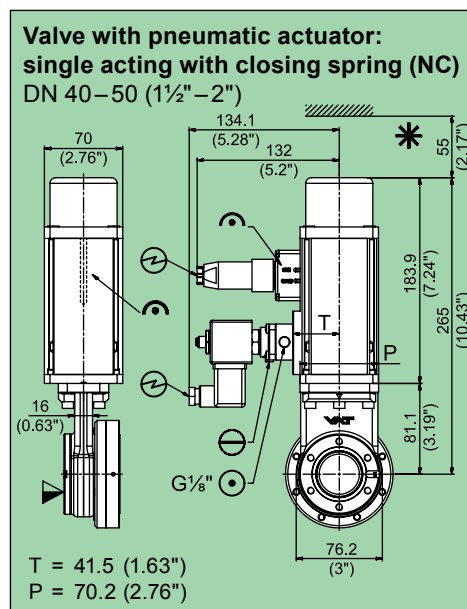
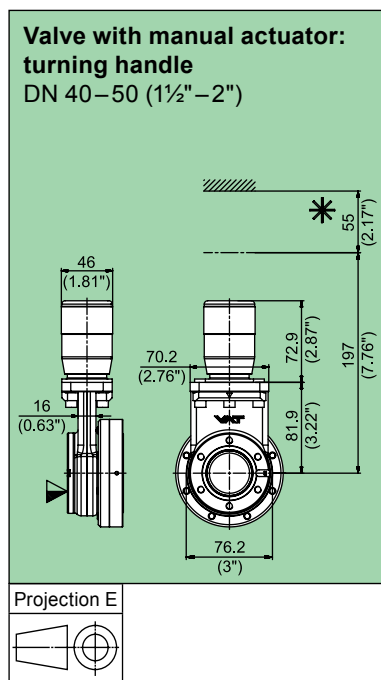
**Spare parts**

- **Seals**  
on request (specify fabrication number of valve)

**Accessories**

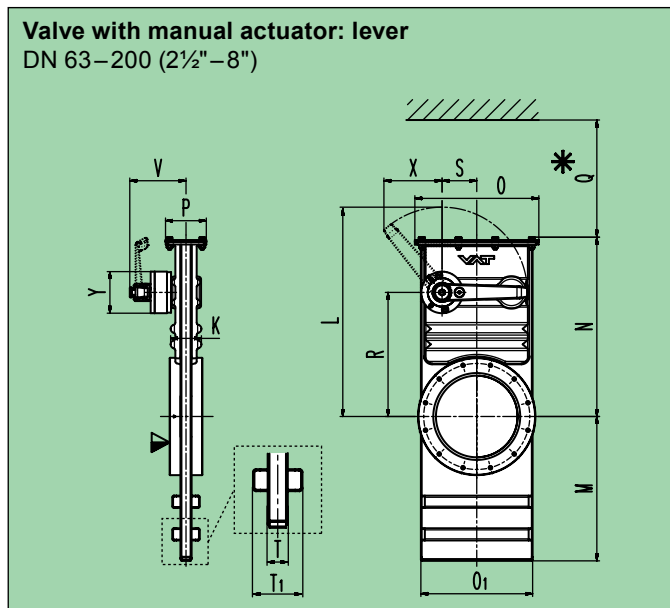
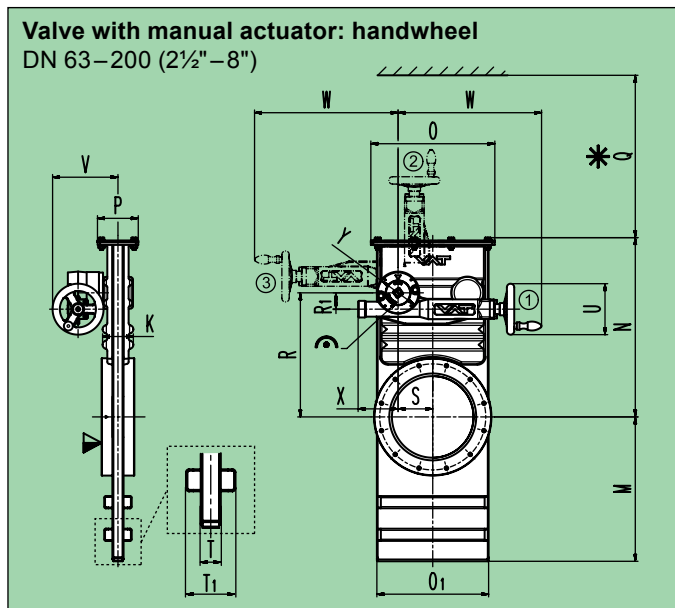
- **Flange connections**  
for installation of the valve: see series 31, 32 and 33

**Dimensions**



- ▽ Valve seat side
- ⊙ Compressed air connection
- ⊕ Mechanical position indication
- \* Required for dismantling
- ⊖ Electrical connection
- ⊖ Emergency operation

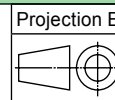
## Main dimensions



Flange dimensions: see pages 96–97

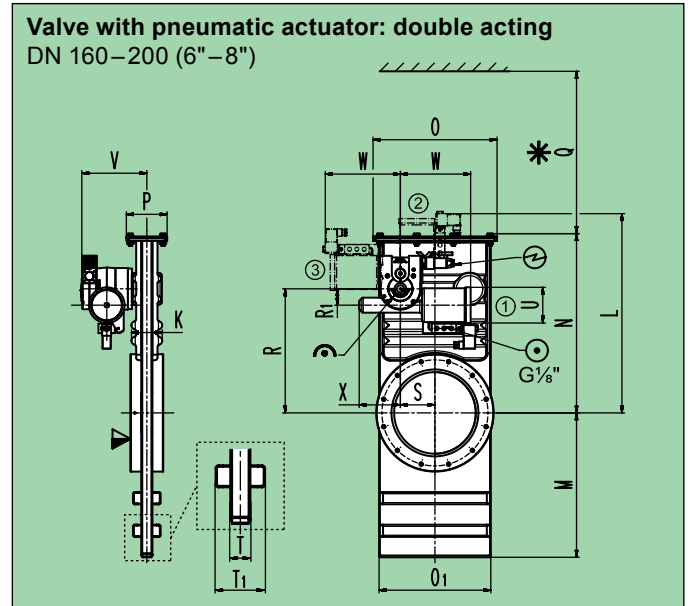
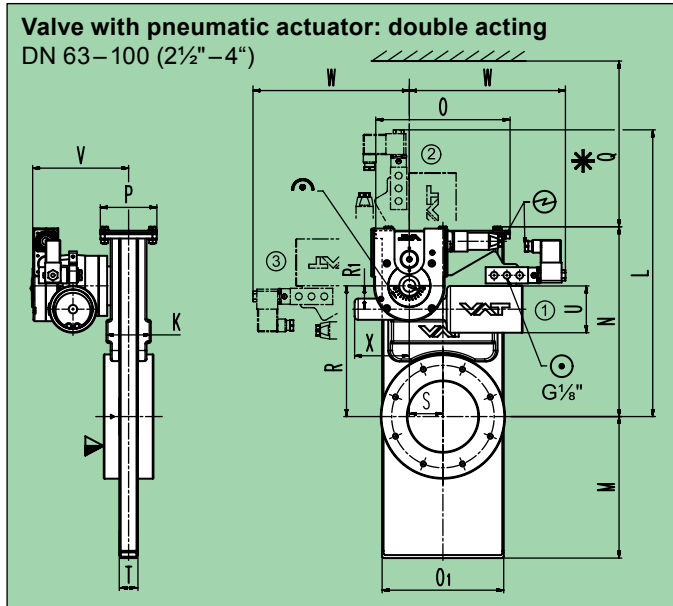
DN	mm inch	63 2½	100 4	160 6	200 8
K	mm inch	51 2.01	63 2.48	74 2.91	77 3.03
M	mm inch	151 5.94	200 7.87	279 10.98	354 13.94
N	mm inch	211 8.31	270 10.63	361 14.21	441 17.36
O	mm inch	152 5.98	190 7.48	252 9.92	304 11.97
O1	mm inch	134 5.28	172 6.77	222 8.74	274 10.79
P	mm inch	80 3.15	80 3.15	100 3.94	100 3.94
Q	mm inch	180 7.09	220 8.66	300 11.81	350 13.78
R	mm inch	146 5.75	185 7.28	245 9.65	305 12.01
R1	mm inch	33 1.30	33 1.30	40 1.57	40 1.57
S	mm inch	30 1.18	47.50 1.87	59 2.32	85 3.35
T	mm inch	26.50 1.04	26.50 1.04	26.50 1.04	26.50 1.04
T1	mm inch	–	–	66 2.60	67.50 2.66
U	mm inch	100 3.94	100 3.94	125 4.92	125 4.92
V	mm inch	129 5.08	129 5.08	160.50 6.32	160.50 6.32
W	mm inch	312 12.28	312 12.28	350 13.78	352 13.86
X	mm inch	78 3.07	78 3.07	98 3.86	98 3.86
Y	mm inch	85 3.35	85 3.35	104 4.09	104 4.09

- ▼ Valve seat side
- \* Required for dismantling
- ⤴ Mechanical position indication
- ① Standard actuator position
- ②③ Optional actuator positions



DN	mm inch	63 2½	100 4	160 6	200 8
K	mm inch	51 2.01	63 2.48	74 2.91	77 3.03
L	mm inch	276 10.87	315 12.40	455 17.91	515 20.28
M	mm inch	151 5.94	200 7.87	279 10.98	354 13.94
N	mm inch	211 8.31	270 10.63	361 14.21	441 17.36
O	mm inch	152 5.98	190 7.48	252 9.92	304 11.97
O1	mm inch	134 5.28	172 6.77	222 8.74	274 10.79
P	mm inch	80 3.15	80 3.15	100 3.94	100 3.94
Q	mm inch	180 7.09	220 8.66	300 11.81	350 13.78
R	mm inch	146 5.75	185 7.28	245 9.65	305 12.01
S	mm inch	30 1.18	47.50 1.87	59 2.32	85 3.35
T	mm inch	26.50 1.04	26.50 1.04	26.50 1.04	26.50 1.04
T1	mm inch	–	–	67.50 2.66	67.50 2.66
V	mm inch	120 4.72	120 4.72	138 5.43	138 5.43
X	mm inch	96 3.78	96 3.78	143 5.63	143 5.63
Y	mm inch	85 3.35	85 3.35	104 4.09	104 4.09

### Main dimensions



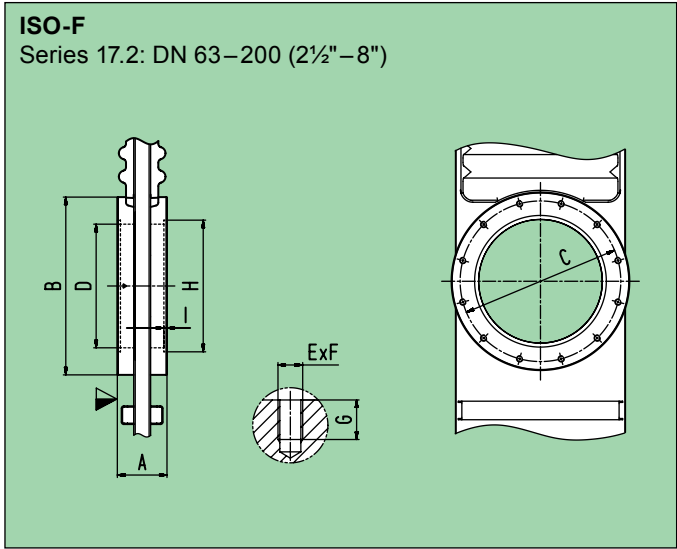
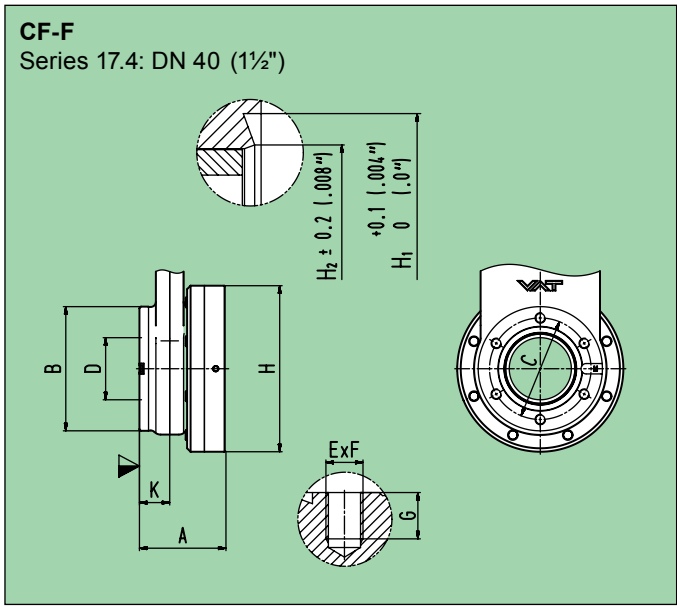
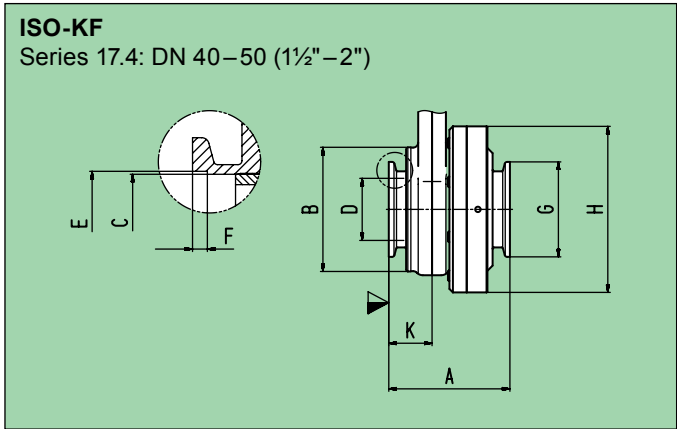
- Projection E
- ▽ Valve seat side
  - \* Required for dismantling
  - ⊙ Compressed air connection
  - ⊖ Electrical connection
  - ⤴ Mech. position indication
  - ① Standard actuator position
  - ②③ Optional actuator positions

Flange dimensions: see pages 96–97

DN	mm inch	63 2½	100 4		
K	mm inch	51 2.01	63 2.48		
L	mm inch	367 14.45	406 15.98		
M	mm inch	151 5.94	200 7.87		
N	mm inch	211 8.31	270 10.63		
O	mm inch	152 5.98	190 7.48		
O1	mm inch	134 5.28	172 6.77		
P	mm inch	80 3.15	80 3.15		
Q	mm inch	180 7.09	220 8.66		
R	mm inch	146 5.75	185 7.28		
R1	mm inch	33 1.30	33 1.30		
S	mm inch	30 1.18	47.50 1.87		
T	mm inch	26.50 1.04	26.50 1.04		
U	mm inch	66 2.60	66 2.60		
V	mm inch	135 5.31	135.20 5.32		
W	mm inch	221 8.70	221 8.70		
X	mm inch	78 3.07	78 3.07		

DN	mm inch	160 6	200 8		
K	mm inch	74 2.91	77 3.03		
L	mm inch	435 17.13	495 19.49		
M	mm inch	279 10.98	354 13.94		
N	mm inch	361 14.21	441 17.36		
O	mm inch	252 9.92	304 11.97		
O1	mm inch	222 8.74	274 10.79		
P	mm inch	100 3.94	100 3.94		
Q	mm inch	300 11.81	350 13.78		
R	mm inch	245 9.65	305 12.01		
R1	mm inch	40 1.57	40 1.57		
S	mm inch	59 2.32	85 3.35		
T	mm inch	26.50 1.04	26.50 1.04		
T1	mm inch	66 2.60	67.50 2.66		
U	mm inch	88 3.46	87 3.43		
V	mm inch	159 6.26	159 6.26		
W	mm inch	190 7.48	190 7.48		
X	mm inch	100 3.94	100 3.94		

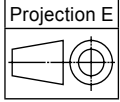
## Flange dimensions



		ISO-KF		CF-F	
DN	mm inch	40 1½	50 2	40 1½	50 2
A	mm inch	70 2.76	70 2.76	50 1.97	on request
B	mm inch	72 2.83	72 2.83	72 2.83	
C	mm inch	40.40 1.59	50 1.97	58.70 2.31	
D	mm inch	36 1.42	36 1.42	36 1.42	
E	mm inch	41.30 1.63	52.30 2.06	–	
E x F <sup>1)</sup>		–	–	6 x M6	
E x F <sup>2)</sup>		–	–	6 x ¼" 28 UNF	
F	mm inch	3 0.12	3 0.12	–	
G	mm inch	55 2.17	75 2.95	7 0.28	
H	mm inch	96 3.78	96 3.78	–	
H1	mm inch	–	–	48.30 1.90	
H2	mm inch	–	–	42 1.65	
K	mm inch	25 0.98	25 0.98	17.50 0.69	

1) Metric threads  
2) UNF threads

DN	mm inch	63 2½	100 4	160 6	200 8
A	mm inch	70 2.76	70 2.76	70 2.76	80 3.15
B	mm inch	130 5.12	165 6.50	225 8.86	285 11.22
C	mm inch	110 4.33	145 5.71	200 7.87	260 10.24
D	mm inch	70 2.76	100 3.94	150 5.91	200 7.87
E x F		4 x M8	8 x M8	8 x M10	12 x M10
G	mm inch	13 0.51	13 0.51	15 0.59	15 0.59
H	mm inch	–	102 4.02	153 6.02	213 8.39
I	mm inch	–	3 0.12	5 0.20	5 0.20

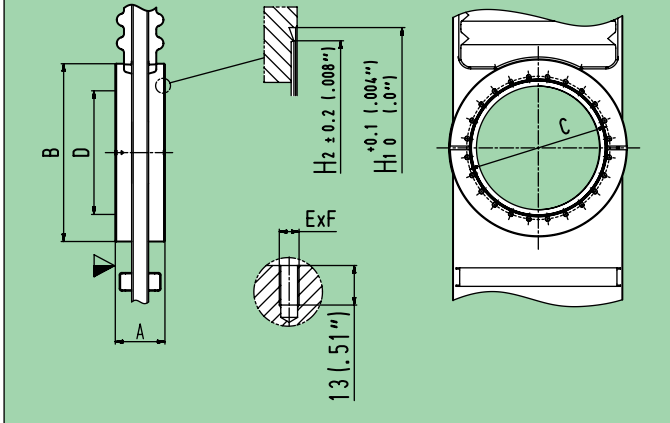


▼ Valve seat side

### Flange dimensions

#### CF-F

Series 17.2: DN 63–200 (2½"–8")



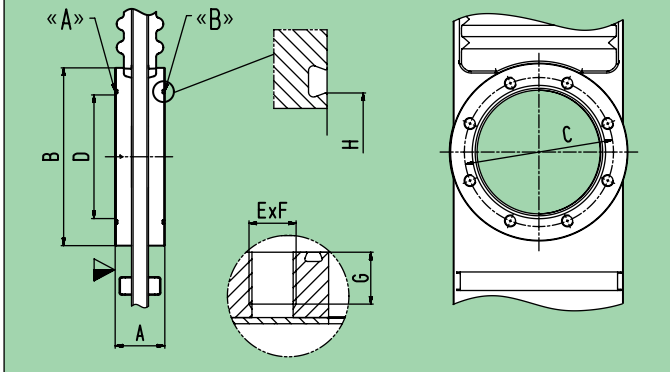
1) Metric threads  
2) UNF threads

DN	mm inch	63 2½	100 4	160 6	200 8
O.D.	inch	4½	6	8	10
A	mm inch	70 2.76	70 2.76	70 2.76	80 3.15
B	mm inch	113.50 4.47	151.60 5.97	202.40 7.97	253.20 9.97
C	mm inch	92.10 3.63	130.20 5.13	181 7.13	231.80 9.13
D	mm inch	70 2.76	100 3.94	150 5.91	200 7.87
E × F <sup>1)</sup>		8 × M8	16 × M8	20 × M8	24 × M8
E × F <sup>2)</sup>		8 × 5/16" 24 UNF	16 × 5/16" 24 UNF	20 × 5/16" 24 UNF	24 × 5/16" 24 UNF
H1	mm inch	82.50 3.25	120.70 4.75	171.45 6.75	222.40 8.76
H2	mm inch	77.40 3.05	115.50 4.55	166 6.54	217 8.54

#### ASA-LP

Series 17.2: DN 63–200 (2½"–8")  
with or without O-ring groove

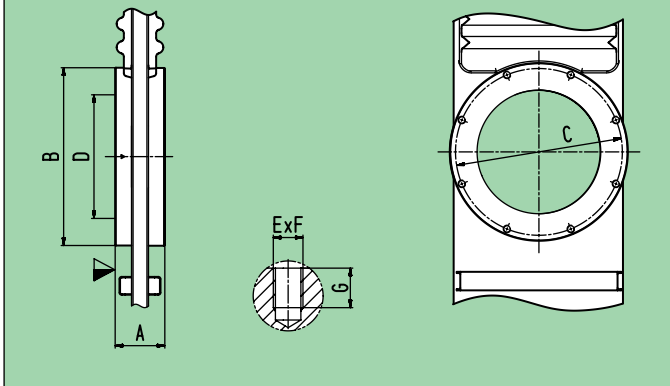
For orders with O-ring groove specify:  
«A», «B» or «A+B»



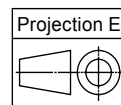
DN	mm inch	63 2½	100 4	160 6	200 8
ASA-LP		2	3	4	6
A	mm inch	70 2.76	70 2.76	70 2.76	80 3.15
B	mm inch	152.40 6	190.50 7.50	225 8.86	279.40 11
C	mm inch	120.70 4.75	152.40 6	190.50 7.50	241.30 9.50
D	mm inch	70 2.76	100 3.94	150 5.91	200 7.87
E × F		4 × 3/8" 16 UNC	4 × 3/8" 16 UNC	8 × 3/8" 16 UNC	8 × 3/4" 10 UNC
G	mm inch	15 0.59	15 0.59	15 0.59	19 0.75
H	mm inch	88.90 3.50	120.65 4.75	158.75 6.25	206.40 8.13
O-ring I.D. × d	mm inch	88.49 × 3.53 3.48 × .139	120.24 × 3.53 4.73 × .139	158.34 × 3.53 6.23 × .139	202.79 × 3.53 7.98 × .139

#### JIS B 2290: 1998 / ISO 1609

Series 17.2: DN 65–200 (2½"–8")



DN	mm inch	65 2½	100 4	150 6	200 8
A	mm inch	70 2.76	70 2.76	70 2.76	80 3.15
B	mm inch	136 5.35	185 7.28	235 9.25	300 11.81
C	mm inch	120 4.72	160 6.30	210 8.27	270 10.63
D	mm inch	70 2.76	100 3.94	150 5.91	200 7.87
E × F		4 × M10	8 × M10	8 × M10	8 × M12
G	mm inch	12 0.47	12 0.47	12 0.47	15 0.59



▽ Valve seat side