

BI-DIRECTIONAL KNIFE GATE VALVE SCC SERIES



KGV SCC SERIES WITH D/A PNEUMATIC ACTUATOR



KGV SCC SERIES WITH HANDWHEEL AND RISING STEM

The SCC series knife gate is a bi-directional resilient seated square valve with frontal upper sealing designed to handle wastewater, mud, fish pump services and general liquid mediums. The design of the body and seat ensures a bubble-tight shutoff in both directions of the flow.

**GENERAL FEATURES**

- 100% tight in both directions
- Square shaped knife gate valve
- Two casted chambers design
- Elastomeric U-seat, fixed between the two bodies by screws
- Full bore design
- Short face to face dimension
- Fully sealed to the atmosphere and to the pipeline
- Easy drive replacement
- Proximity and limit switch mounting points

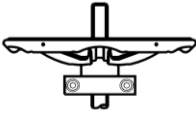
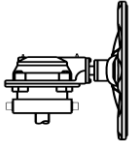
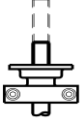
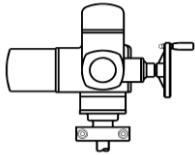
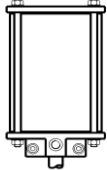
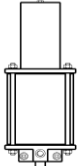
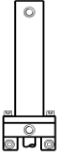
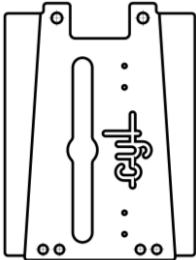
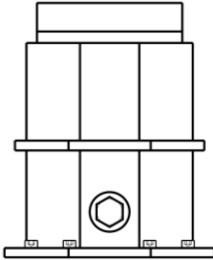
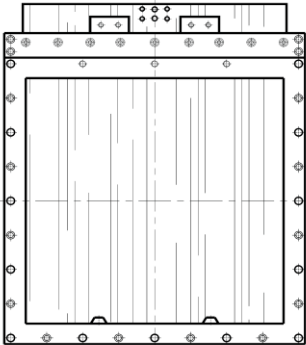
**APPLICATION FIELDS**

- Wastewater treatment
- Fish handling
- Cruises and ships
- Food and beverage
- Chemical and pharmaceutical
- Biomass
- Etc

**TECHNICAL DATA**

- **Size range:**  
DN-200 x DN-200 to DN-600 x DN-600  
Note: larger diameters under request
- **Working pressure:**  
DN-200 x DN-200 to DN-300 x DN-300: 6 kg/cm<sup>2</sup>  
DN-350 x DN-350 to DN-400 x DN-400: 5 kg/cm<sup>2</sup>  
DN-450 x DN-450 to DN-600 x DN-600: 3 kg/cm<sup>2</sup>  
Note: for higher pressure, please ask factory
- **Coating**  
RAL 5017, 150 microns epoxy coated
- **Directives:**  
Pressure equipment directive 97/23/CE  
DIR 2006/42/CE (MACHINES)

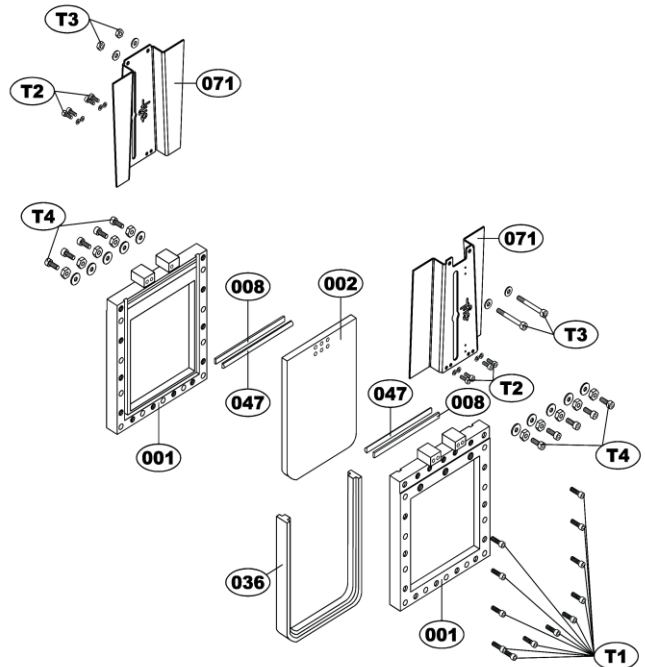
ASSEMBLY CONFIGURATION

	STANDARD	OPTIONAL					
OPERATION	 Rising stem handwheel	 Gearbox	 Rising stem coupling A	 Electric actuator	 Double acting pneumatic actuator	 Spring-return pneumatic actuator	 Oil hydraulic actuator
PLATES	 Plates	 Tight closed bonnet					
BODY	 Semi lugged (wafer)						
ACCESORIES	<ul style="list-style-type: none"> <li>- Locking device</li> <li>- Overriding actuator</li> <li>- Mechanical limit switches</li> <li>- Proximity limit switches</li> <li>- Mechanical position indicator</li> <li>- Chest scraper (bronze/PPS-plastic)</li> <li>- Deflector cone (Ni-hard)</li> <li>- Solenoid valve</li> <li>- Etc.</li> </ul>						

**MATERIAL SPECIFICATION & PART LIST**

No.	DESCRIPTION	MATERIAL
001	Body	Cast iron (Standard) AISI 316 (optional)
002	Gate	AISI 316 (standard) AISI316TI, DUPLEX2205, SMO254 (optional)
036	Seat	NBR (standard) EPDM, VITON, PTFE, SILICONE(optional)
047	Packing material	NBR (standard) EPDM, VITON, PTFE, SILICONE (optional)
T	Screws and nuts	A4
008	Push rods	SS 316
071	Plates	1.0580 (standard) SS 316 (optional)
-	Stem	SS 316
-	Bearing	1.0401 (standard) SS 316 (optional)
-	Handwheel	1.0037
-	Pneumatic act.	Aluminium
-	Hand-protections	1.0580 (standard) SS 316 (optional)

Figure 1. Exploded view of KGV SCC series with elastomeric U-seat



**APPLICATION AND TEMPERATURE RANGE**

SEAT AND PACKING MATERIALS			
Material	Min. temperature (°C)	Max. temperature (°C)	APPLICATIONS
NBR	-30	+80	Hydrocarbons and biogas waste
EPDM	-30	+90	Clean and chlorided water
VITON	-40	+180	Organic acids, hydrocarbons and heat resistant
PTFE	-10	+200	Heat, friction, acids, chemical and corrosion resistant
POLIURETHANE	-10	+80	Abrasive mediums/mineral handling
WHITE SILICONE	-20	+180	Food industry (FDA conformity)

*\*More details and other sealing materials under request.*

## DIMENSIONAL DRAWINGS

Figure 2. KGV SCC series rising stem & handwheel

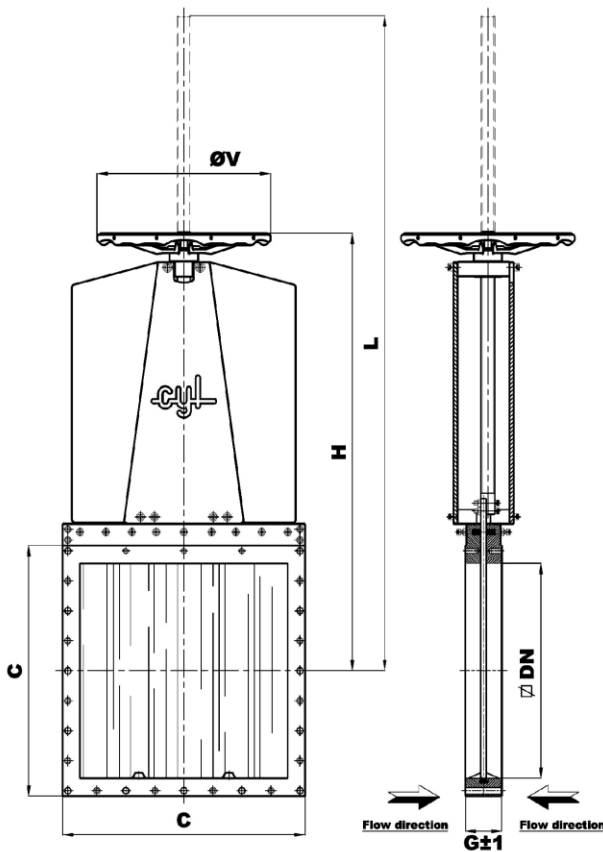


Figure 3. KGV SCC series with double acting pneumatic actuator

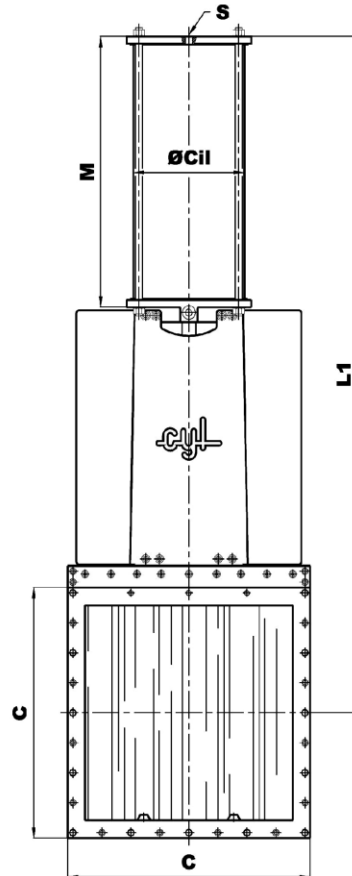
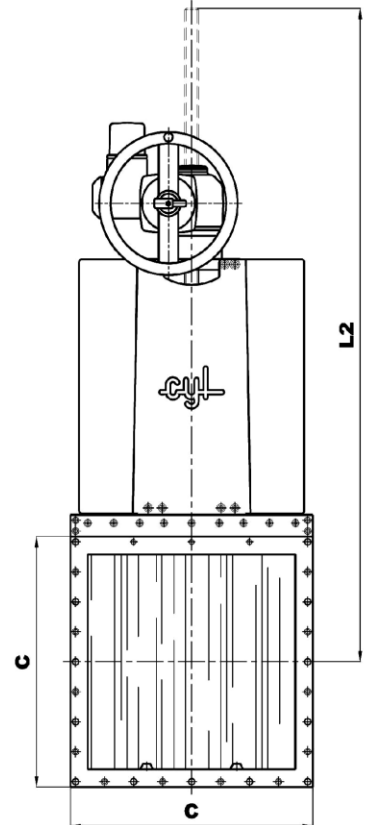


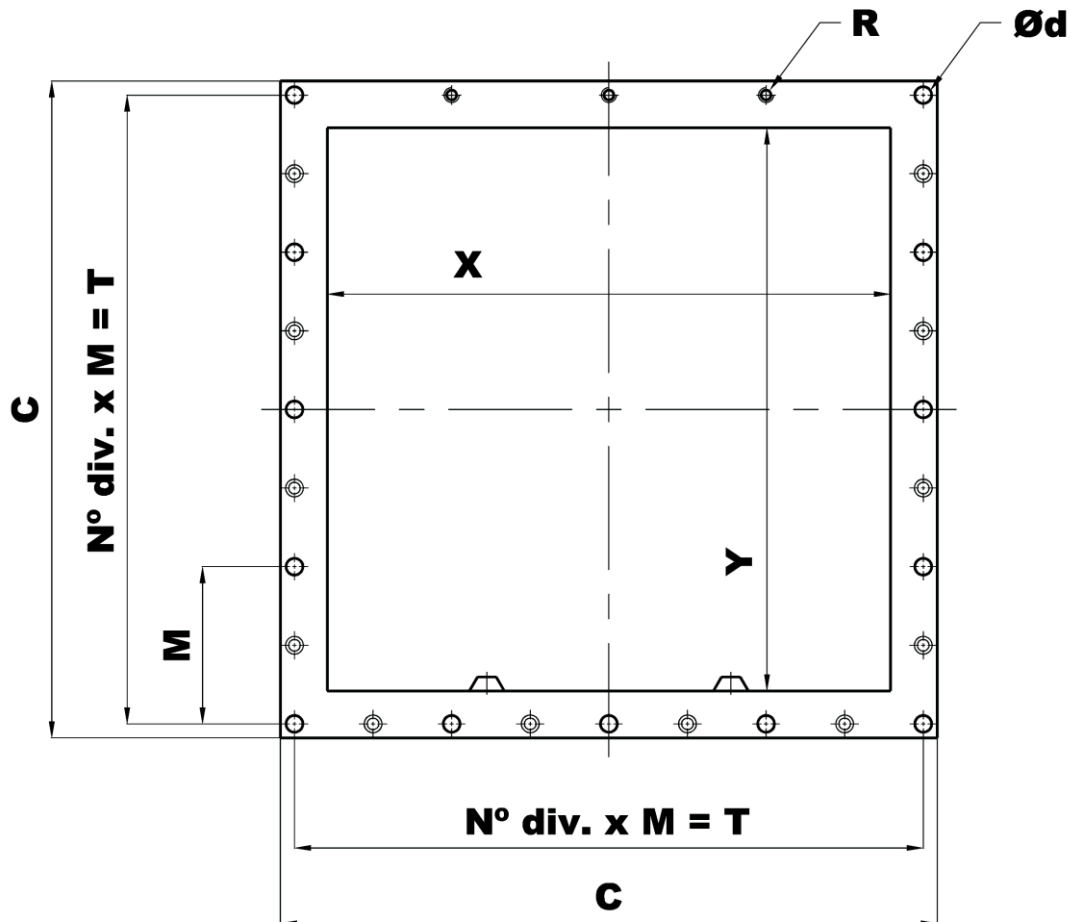
Figure 4. KGV SCC series rising stem & electric actuator



DN	G	L	H	Ø V	L1	M	Ø Cil	S	L2
200 x 200	60	783	582	300	851	327	190	½"G	841
250 x 250	70	909	658	300	975	375	190	½"G	973
300 x 300	80	1062	760	400	1119	428	190	½"G	1121
350 x 350	80	1185	833	400	1263	499	250	½"G	1244
400 x 400	90	1303	901	400	1381	549	250	½"G	1352
500 x 500	95	1622	1114	500	1681	656	300	½"G	1632
600 x 600	105	1830	1222	500	1889	756	300	½"G	1825

Note: for bigger sizes, please ask factory.

FLANGE DRILLINGS



X x Y	●	○	R	$\varnothing d$	C x C	$N^\circ \text{ div.} \times M = T$
200 x 200	2	10	M-12	$\varnothing 14$	280 x 280	3 x 85 = 255
250 x 250	2	10	M-12	$\varnothing 14$	340 x 340	3 x 103 = 309
300 x 300	2	10	M-12	$\varnothing 14$	390 x 390	3 x 120 = 360
350 x 350	2	10	M-12	$\varnothing 14$	450 x 450	3 x 140 = 420
400 x 400	3	13	M-12	$\varnothing 14$	500 x 500	4 x 117,5 = 470
500 x 500	3	13	M-14	$\varnothing 16$	600 x 600	4 x 142,5 = 570
600 x 600	3	13	M-16	$\varnothing 18$	700 x 700	4 x 167,5 = 670

- **Threaded holes**
- **Through holes**

ORDERING GUIDE

SERIES	OPERATIONS	BODY MATERIAL	DN	SEAT MATERIAL	BODY TYPE
SCC SERIES	V	11		NI	W
	V → Handwheel r.s	11 → Cast iron		NI → NBR	W → Semi lugged (WAFER)
	VR → Handwheel r.s + Bevel Gearbox	14 → Stainless steel		EP → EPDM	
	B → Iso top flange r.s.	17 → Fully stainless steel		VI → VITON	
	BR → Iso top flange r.s. + Bevel Gearbox			TE → PTFE	
	M → Electric actuator r.s.			PU → POLIURETHANE	
	MR → Electric actuator r.s. + Bevel Gearbox				
	N → D/A pneumatic actuator				
	SE → S/A pneumatic actuator				
	H → Oil hydraulic actuator				