

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 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
- With frontal upper sealing
- 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


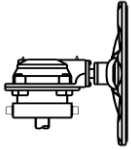
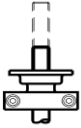
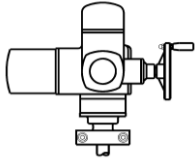
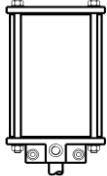
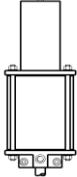
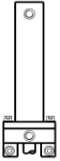
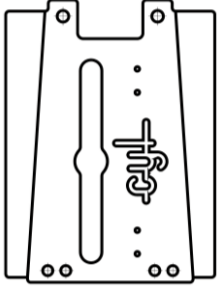
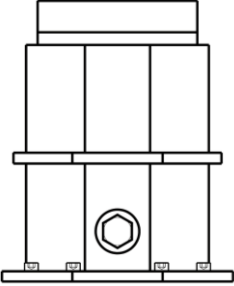
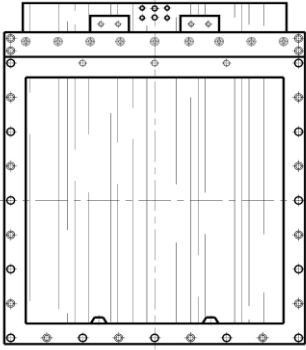
APPLICATION FIELDS

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

TECHNICAL DATA

- **Size range:**
DN-200 x DN-200 to DN-600 x DN-600
(Larger diameters under request)
- **Working pressure:**
DN-200 x DN-200 to DN-300 x DN-300: 6 kg/cm²
DN-350 x DN-350 to DN-400 x DN-400: 5 kg/cm²
DN-450 x DN-450 to DN-600 x DN-600: 3 kg/cm²
(For higher pressure, please ask factory)
- **Directives:**
Pressure equipment directive 97/23/CE
DIR 2006/42/CE (MACHINES)

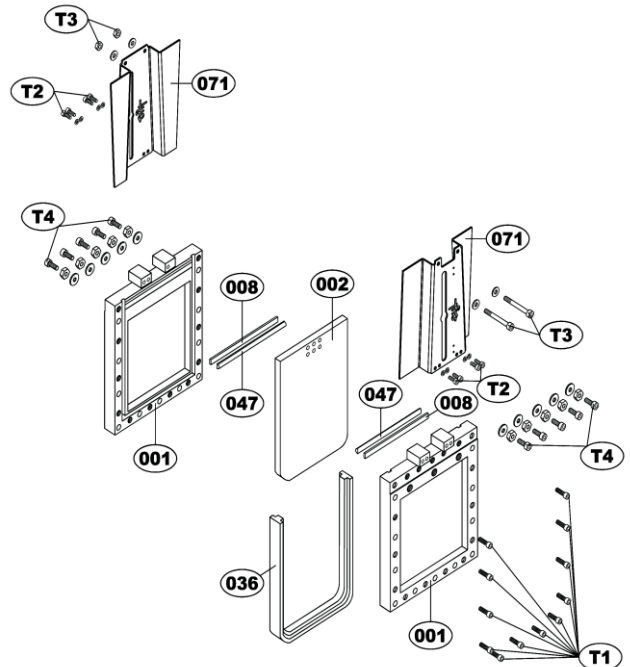
ASSEMBLY CONFIGURATION

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

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)

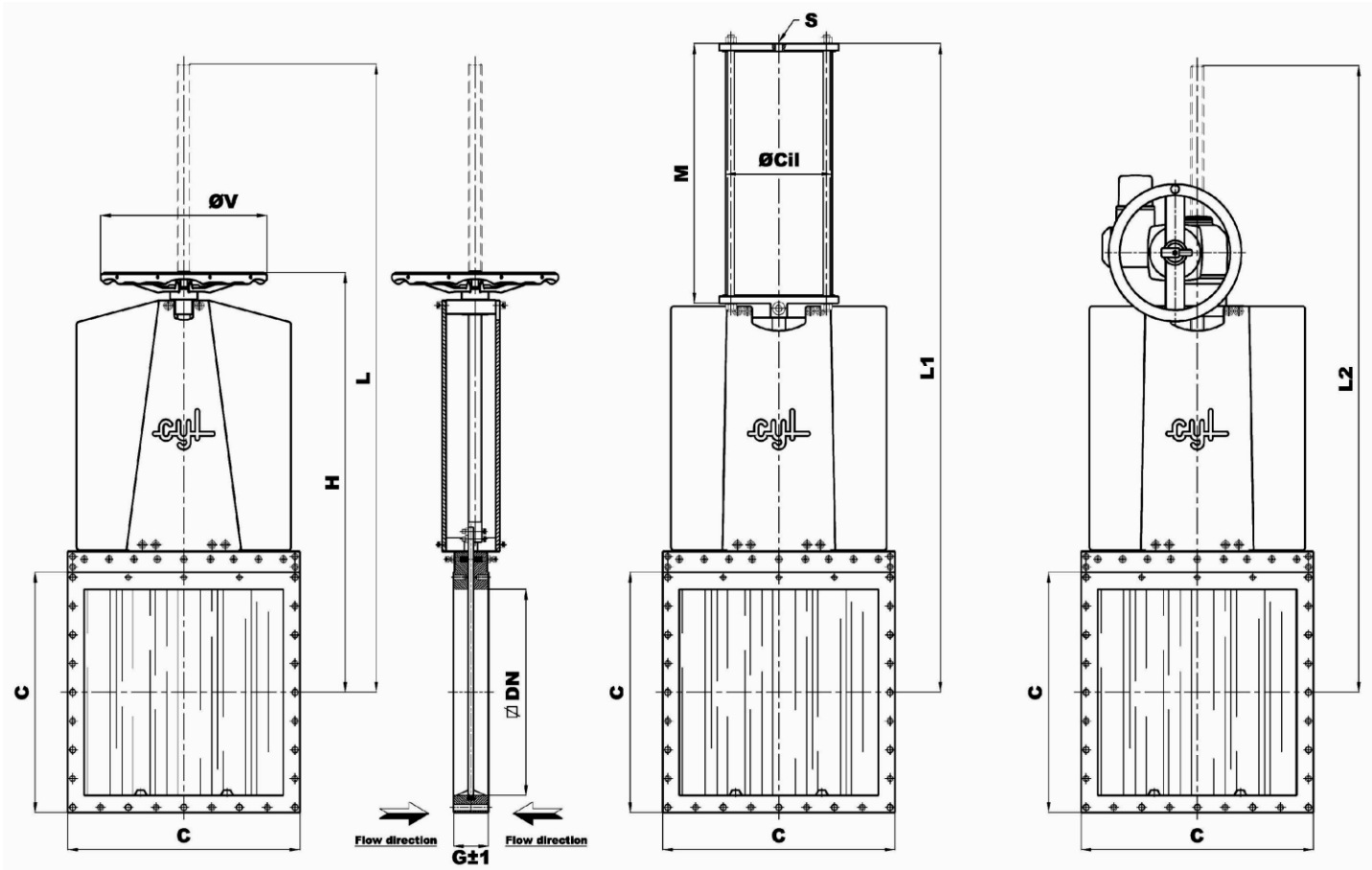
*More details and other sealing materials under request.

DIMENSIONAL DRAWINGS

Figure 2. KGV SCC series rising stem & handwheel

Figure 3. KGV SCC series with double acting pneumatic actuator

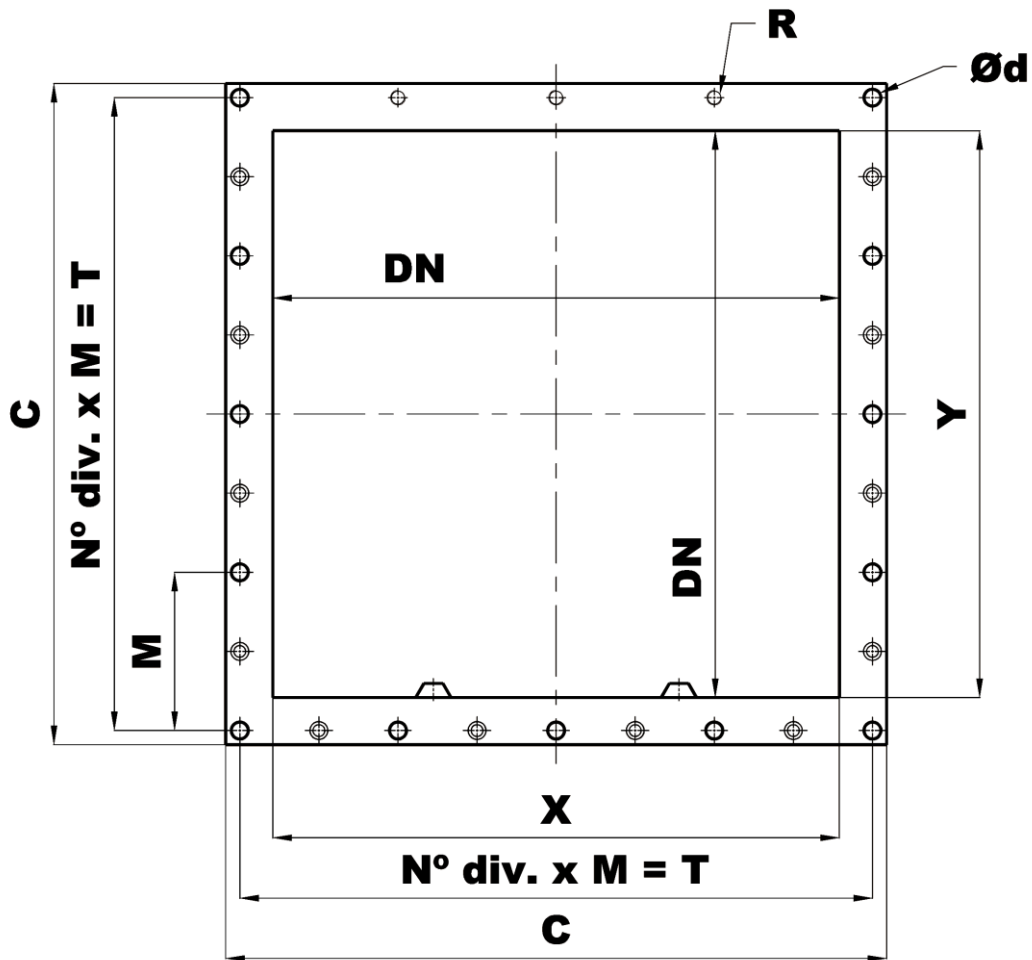
Figure 4. KGV SCC series rising stem & electric actuator



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 300	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 300	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				