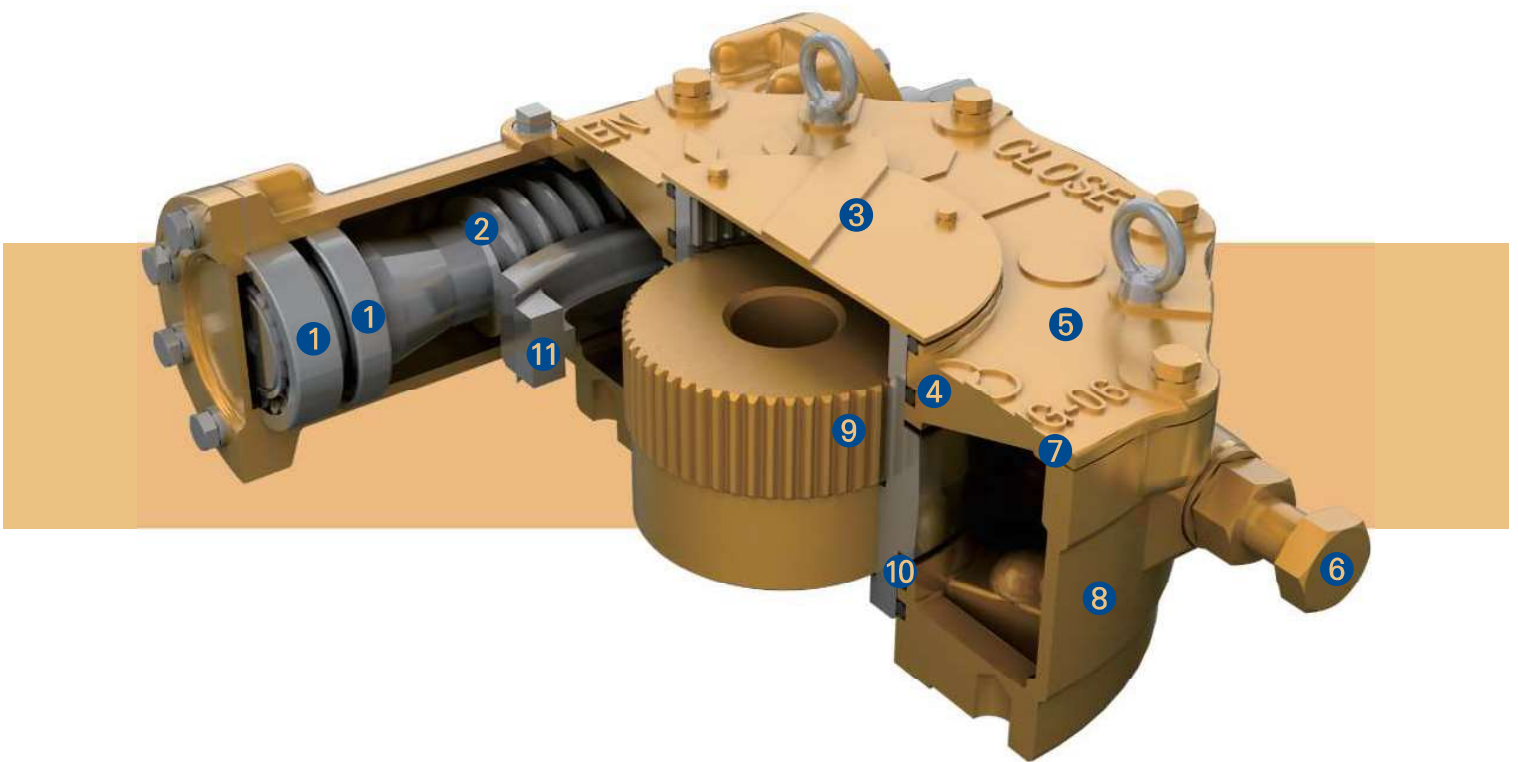


# Worm Gear Actuators

## Special View & Features



### ① Tapered Roller & Ball Bearings

The Worm is supported on tapered roller bearings which support both the axial and radial forces generated by the gearings. They have excellent load bearing capacity.

### ② Worm

1045 heat treated steel, with ground and polished worm threads. Precision cutting of the threads provides minimum backlash between the worm gear and worm.

### ③ Indicator Plate

Pointer provides positive position indication. The pointer can easily be re-positioned if required.

#### ④ Sealing

The drive sleeve is supplied with a oil seal at the top and large cross-section o-ring at the bottom. This sealing method allows the units to be rated for submersible service to Ip67 standards.

#### ⑤ Cover

Legends, 'Close-Open-Close' are cast directly on the cover. This permits operation in either direction with position indication.

#### ⑥ External Adjustable Stops

The stop bolts allow for position accuracy of  $\pm 5^\circ$ .

Each bolt also includes Buna-N sealing washers or prevent water intrusion

#### ⑦ Gaskets

Each end of the worm assembly is equipped with special design material(non-asbestos), which are completely water resistant.

## This series of Worm Gears range from 360N.m (260ft-lbf) to 970,000N.m (710,000 ft-lbf)

Units are available with single, double and triple reduction spur gear.  
Other options available are : vertical input

#### ⑧ Housing

All external castings are Ductile Iron. Class 65-45-12, Tensile Strength of 65,000 psi

#### ⑨ Splined Bushings

All units furnished with removable splined bushings to permit accurate position between the gear drive and the valve shaft.

#### ⑩ Thrust Washer

The drive sleeve is furnished with hardened steel thrust washers above and below worm gear. This minimizes frictional looseness between the gear and the ductile iron castings.

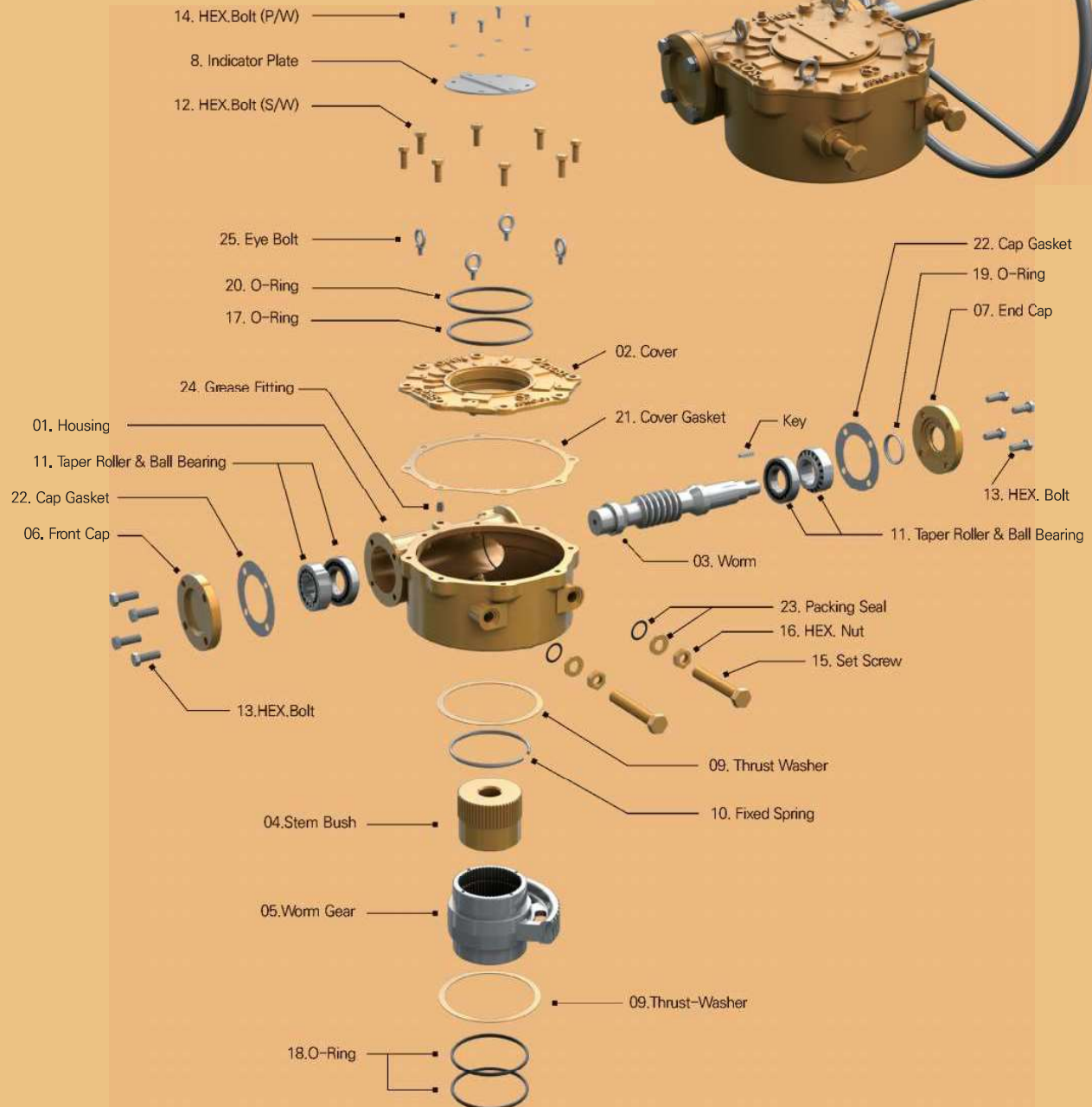
#### ⑪ Worm Gear

Standard material is Ductile Iron, Grade 80-55-06, Suitable most industrial applications.  
Option is aluminum bronze having a tensile strength of 85,000 psi.  
Normally required for motorized applications involving modulating service and is also a requirement to meet the AWWA standards.

# Worm Gear Actuator Assembly

## STANDARD TYPE-A

### Horizontal Input



## ❖ Part List & Material

	NO	DESCRIPTION	MATERIAL			REMARK
			NAME	JIS	ASTM	
STANDARD	1	Housing	Ductile Iron	FCD-450	A536-65-45-12	NOTE. 1
	2	Cover	Ductile Iron	FCD-450	A536-65-45-12	NOTE. 1
	3	Worm	Carbon Steel	S45C	A576-1045	NOTE. 2
	4	Stem Bush	Ductile Iron	FCD-450	A536-65-45-12	
	5	Worm Gear	Ductile Iron	FCD-600	A536-80-55-06	B148-C95800(ALBC3)
	6	Front Cap	Ductile Iron	FCD-450	A536-65-45-12	
	7	End Cap	Ductile Iron	FCD-450	A536-65-45-12	
	8	Indicator Plate	Steel + EP			
	9	Thrust Washer	Steel			
	10	Fixed Spring	Steel			
	11	Taper Roller & Ball Bearing	Special Steel	SUJ2	A295-52100	
	12	HEX. Bolt	Alloy Steel	SCM435	A322-4135	
	13	HEX. Bolt	Alloy Steel	SCM435	A322-4135	
	14	HEX. Bolt (P/W)	Stainless Steel			
	15	Set Screw	Carbon Steel	S45c	A576-1045	
	16	HEX. Nut	Carbon Steel	S45c	A576-1045	
	17	O-Ring	Buna N	NBR		NOTE. 3
	18	O-Ring	Buna N	NBR		
	19	O-Ring	Buna N	NBR		
	20	O-Ring	Buna N	NBR		
	21	Cover Gasket	Non - Asbestos			VALQUA 6601
	22	Cap Gasket	Non - Asbestos			
	23	Packing Seal	Bunan	NBR		
	24	Grease Fitting	Steel + Galvanizing			
	25	Eye Bolt	Steel + Galvanizing			
OPTION	OP-01.	Hand Wheel	Steel Pipe	SGP	A53	HANDLE PART NOTE. 4
	OP-02.	Key	Carbon Steel	S45C	A576-1045	
	OP-03.	Name Plate	Stainless Steel			
	OP-04.	Washer	Stainless Steel			
	OP-05.	HEX.Bolt (S/W)	Stainless Steel			

## ❖ Material Detail : Option and Material Changes

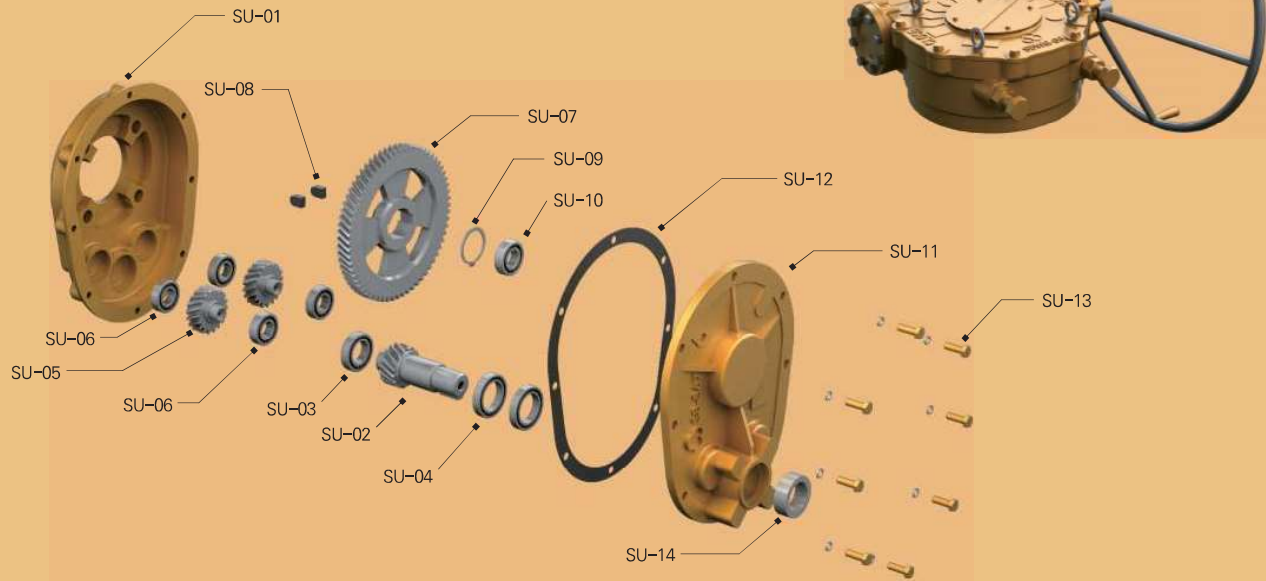
- All castings are Ductile Iron, FCD-450 (ASTM Class 65-45-12)
- In case of option for special request, it can be worked Nickel coating, high tensile stainless.
- Also, the material can be changed as ALBC3(Aluminium Bronze), steel(A576-1045), A439 Gr D2C (Austenitic ductile iron casting) and etc.
- O-Ring Seal & Lubricant : Standard is Buna "N", temperature range -20°C to +120°C (-4°F to +248°F).  
Standard lubricant is Zenith EPSB 2, temperature Range -20°C to +200°C (-4°F to +392°F).  
Other option are : High Temperature Viton O-Ring Grade V75, Temperature Range -30°C to +200°C (-22°F to +392°F)  
Lubricant - Zenith SYN WS2 Temperature Range -30°C~400°C (-22°F 752°F)  
Low Temperature Silicon O-Ring, Temperature Range -60°C to + 150°C(-76°F to 302°F)  
Lubricant - Zenith SLP402, Temperature Range -60°C~140°C (-76°F 284°F)
- SAMBO offers a wide variety of Handwheels, Chainwheels, Input Shaft, Locking Devices and etc.
- SAMBO offers a wide variety of stem cover, stainless steel, Polycarbonate.  
Paint : Unless specified, units are supplied with vp184 Red epoxy primer. SAMBO can provide finish coating upon request.



# Worm Gear Actuator Assembly

## STANDARD TYPE-A

Horizontal Input  
with Single Reduction Gear Attachment



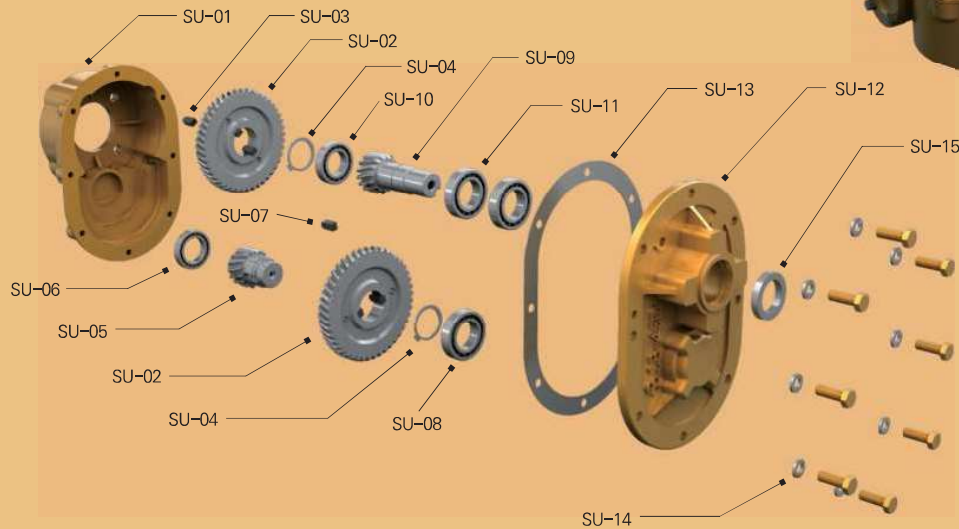
### Part List & Material

NO	DESCRIPTION	MATERIAL			REMARK	NO	DESCRIPTION	MATERIAL			REMARK
		NAME	JIS	ASTM				NAME	JIS	ASTM	
1	Housing	Ductile Iron	FCD-450	A536-65-45-12	NOTE. 1	23	Packing Seal	Buna N	NBR		
2	Cover	Ductile Iron	FCD-450	A536-65-45-12	NOTE. 1	24	Grease Fitting	Steel + Galvanizing			
3	Worm	Carbon Steel	S45C	A576-1045	NOTE. 2	25	Eye Bolt	Steel + Galvanizing			
4	Stem Bush	Ductile Iron	FCD-450	A536-65-45-12		SU-01	Support Housing	Ductile Iron	FCD-450	A536-65-45-12	
5	Worm Gear	Ductile Iron	FCD-600	A536-80-55-06	B148-96800(ALBC3)	SU-02	Helical Pinion	Carbon Steel	S45C	A576-1045	
6	Front Cap	Ductile Iron	FCD-450	A536-65-45-12		SU-03	Radial Ball B/R	Special Steel	SUJ2	A295-52100	
7	End Cap	Ductile Iron	FCD-450	A536-65-45-12		SU-04	Radial Ball B/R	Special Steel	SUJ2	A295-52100	
8	Indicator Plate	Steel + EP				SU-05	Idle Gear	Carbon Steel	S45C	A576-1045	
9	Thrust Washer	Steel				SU-06	Radial Ball B/R	Special Steel	SUJ2	A295-52100	
10	Fixed Spring	Steel				SU-07	Helical Gear	Carbon Steel	S45C	A576-1045	
11	Taper Roller Bearing	Special Steel	SUJ2	A295-52100		SU-08	Key (1R)	Carbon Steel	S45C	A576-1045	
12	HEX. Bolt (S/W)	Alloy Steel	SCM435	A322-4135		SU-09	Snap Ring	Carbon Steel	S45C	A576-1045	
13	HEX. Bolt	Alloy Steel	SCM435	A322-4135		SU-10	Radial Ball B/R	Special Steel	SUJ2	A295-52100	
14	HEX. Bolt (P/W)	Stainless Steel				SU-11	Support Cover	Ductile Iron	FCD-450	A536-65-45-12	
15	Set Screw	Carbon Steel	S45c	A576-1045		SU-12	S-Cover Gasket	Nonasbestos		VALQUA6601	
16	HEX. Nut	Carbon Steel	S45c	A576-1045		SU-13	HEX. Bolt (S/W)	Alloy Steel	SCM435	A322-4135	
17	O-Ring	Buna N	NBR		NOTE. 3	SU-14	Oil-Seal	Buna N	NBR		
18	O-Ring	Buna N	NBR			OP-01	Hand Wheel	Steel Pipe	SGP	A53	OPTION HANDLE PART
19	O-Ring	Buna N	NBR			OP-02	Key(1R)	Carbon Steel	S45C	A576-1045	
20	O-Ring	Buna N	NBR			OP-03	Name Plate	Stainless Steel			
21	Cover Gasket	Non - Asbestos			OP-04	Washer	Stainless Steel				
22	Cap Gasket	Non - Asbestos			OP-05	HEX. Bolt (S/W)	Stainless Steel				

# Worm Gear Actuator Assembly

## STANDARD TYPE-A

Horizontal Input  
with Double Reduction Gear Attachment



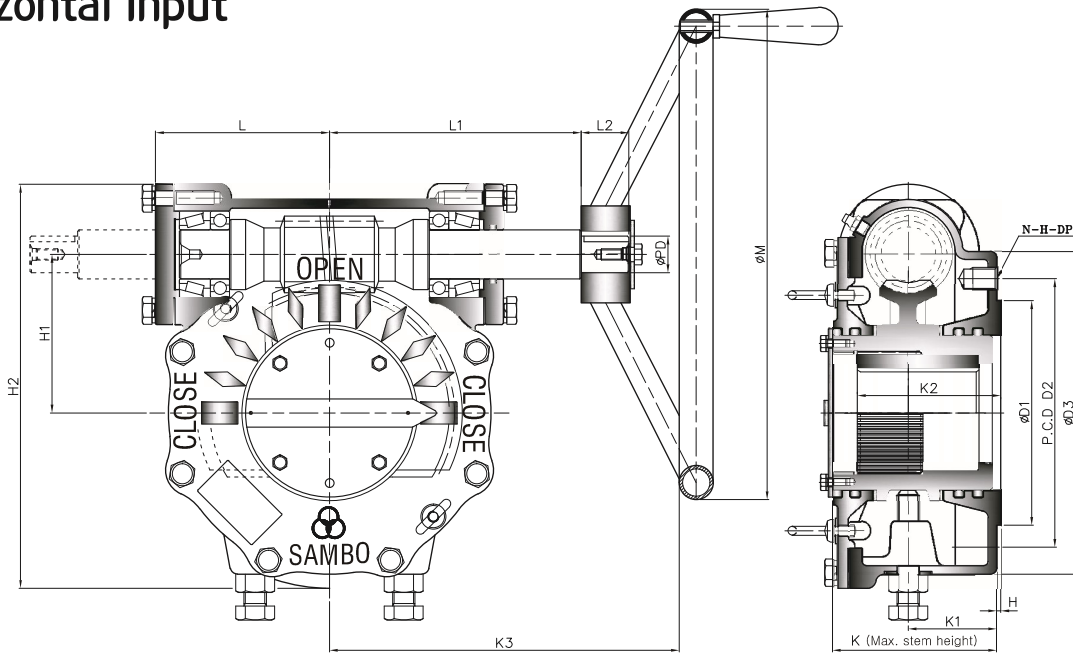
### Part List & Material

NO	DESCRIPTION	MATERIAL			REMARK	NO	DESCRIPTION	MATERIAL			REMARK	
		NAME	JIS	ASTM				NAME	JIS	ASTM		
1	Housing	Ductile Iron	FCD-450	A536-65-45-12	NOTE. 1	23	Packing Seal	Buna N	NBR			
2	Cover	Ductile Iron	FCD-450	A536-65-45-12	NOTE. 1	24	Grease Fitting	Steel + Galvanizing				
3	Worm	Carbon Steel	S45C	A576-1045	NOTE. 2	25	Eye Bolt	Steel + Galvanizing				
4	Stem Bush	Ductile Iron	FCD-450	A536-65-45-12		SU-01	Support Housing	Ductile Iron	FCD-450	A536-65-45-12		
5	Worm Gear	Ductile Iron	FCD-600	A536-80-55-06	B148-95800(ALBC3)	SU-02	Helical Gear	Carbon Steel	S45C	A576-1045		
6	Front Cap	Ductile Iron	FCD-450	A536-65-45-12		SU-03	Key (1R)	Carbon Steel	S45C	A576-1045		
7	End Cap	Ductile Iron	FCD-450	A536-65-45-12		SU-04	Snap Ring	Carbon Steel	S45C	A576-1045		
8	Indicator Plate	Steel + EP				SU-05	Idle Gear	Carbon Steel	S45C	A576-1045		
9	Thrust Washer	Steel				SU-06	Radial Ball B/R	Special Steel	SUJ2	A295-52100		
10	Fixed Spring	Steel				SU-07	Key (1R)	Carbon Steel	S45C	A576-1045		
11	Taper Roller Bearing	Special Steel	SUJ2	A295-52100		SU-08	Radial Ball B/R	Special Steel	SUJ2	A295-52100		
12	HEX. Bolt (S/W)	Alloy Steel	SCM435	A322-4135		SU-09	Helical Pinion	Carbon Steel	S45C	A576-1045		
13	HEX. Bolt	Alloy Steel	SCM435	A322-4135		SU-10	Radial Ball B/R	Special Steel	SUJ2	A295-52100		
14	HEX. Bolt (P/W)	Stainless Steel				SU-11	Radial Ball B/R	Special Steel	SUJ2	A295-52100		
15	Set Screw	Carbon Steel	S45c	A576-1045		SU-12	Support Cover	Ductile Iron	FCD-450	A536-65-45-12		
16	HEX. Nut	Carbon Steel	S45c	A576-1045		SU-13	S-Cover Gasket	Nonasbestos			VALQUA6601	
17	O-Ring	Buna N	NBR		NOTE. 3	SU-14	HEX. Bolt (S/W)	Stainless	SCM435	A322-4135		
18	O-Ring	Buna N	NBR			SU-15	Oil-Seal	Buna N	NBR			
19	O-Ring	Buna N	NBR			OP-01	Hand Wheel	Steel Pipe	SGP	A53	OPTION HANDLE PART	
20	O-Ring	Buna N	NBR			OP-02	Key (1R)	Carbon Steel	S45C	A576-1045		
21	Cover Gasket	Non - Asbestos				OP-03	Name Plate	Stainless Steel				
22	Cap Gasket	Non - Asbestos			OP-04	Washer	Stainless Steel					
					OP-05	HEX. Bolt (S/W)	Stainless Steel					

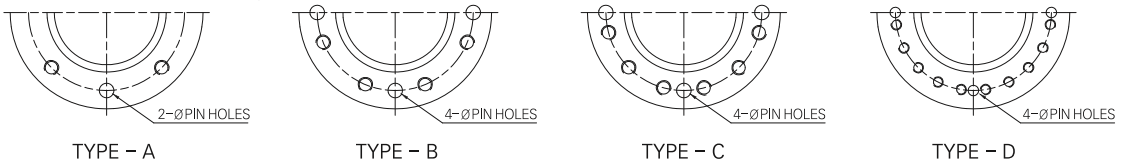
Size and component specification in this catalogue are subject to change without prior notice for quality improvement.

# STANDARD TYPE-A

## Horizontal Input



• Pin hole size is same as tap out diameter



## Dimension

UNIT : mm

MODEL	DIM	BASE PART							EXTERNAL PART							INPUT SHAFT PART		H AND WHEEL		
		TYPE	FLANGE	ØD1	P.C.D		ØD3	H	H1	H2	K	K1	K2	K3	L	L1	L2		ØPD	KEY
					ØD2	N-H-DP														
SBWG-BF	A	F-07	55	70	4-M8-12	110	2	42	132	76	38	38.6	150	64	97	24	16	6X6	200	
SBWG-0		F-10	70	102	4-M10-15	135		57	159.5	77	38	43.6	177	71.5	104.5				250	
SBWG-00		F-12	85	125	4-M12-18	165		69.5	192	86.5	43	53.6	230	86	138				300	
SBWG-01		F-14	100	140	4-M16-24	190		82.5	217.5	96	53	65	260	95	147				400	
SBWG-02		F-16	130	165	4-M20-30	220		97	257	109.5	56	75.5	294	108	166				500	
SBWG-03	B	(F-16) F-20	160	205	8-M16-24	250	3	112	287	116	59	87	324	118	176	34	26	8X7	560	
SBWG-35		F-25	200	254	8-M16-24	300		127	319.5	126	63	91	329	125	181				630	
SBWG-04		F-25	200	254	8-M16-24	300		153	385.5	147	73	120	370	153	207				710	
SBWG-05		F-30	230	298	8-M20-30	350		180	437.5	155	78	141	400	163	217				800	
SBWG-55			350	202	484.5	162		80	144	420	183	237	900							
SBWG-06		F-35	260	356	8-M30-45	415		230	558.5	200	109	175	489	117	286				800	
SBWG-07		F-40	300	406	8-M36-55	475		280.5	660.5	227	116	209	538	252	315				900	
SBWG-75		C	F-48	370	483	12-M36-55		560	5	326	776	246	120	220	617				279	381
SBWG-08	560						379	884		254	125	245	652	314	416					
SBWG-09	D	F-60	470	603	20-M36-55	700	5	448.5	1023.5	284	138	270	692	354	456	58	50	16X10	1000	
SBWG-10						800		513	1191	352	164	330	814	426	614					
SBWG-11						900		616.5	1399.5	400	181	370	857	468.5	657					
SBWG-12						1000		711	1621	484	265	455	980	554	702					
SBWG-13						1000		809	1814	546	301	515	988	609	752					

# Worm Gear Actuators

## ❖ Feature

- All mounting bases conform to ISO 5210/1 standards.
- All castings are ductile iron, Class 65-45-12 excellent strength and impact resistance.
- Worm gear material is available in two option.
  - ▶ Ductile iron, Class 80-55-06
  - ▶ Aluminum bronze, B148-C95800
- Worm is 1045 heat treated Carbon steel.
- Removable splined bushing to permit accurate positioning between gear drive and valve stem.
- Options include hand wheels, chain and etc.

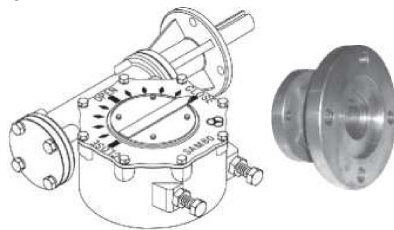
### Bushing Type

Splines permit accurate alignment of valve stem key.



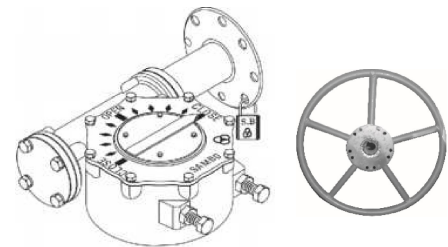
### M · O · V OPTION

Worm Gear can be provided with Motor actuator input flanges to accept standard ISO Mounting Base.



### LOCKING DEVICE OPTION

Input can be equipped with a Handwheel locking device for Manually operated units.



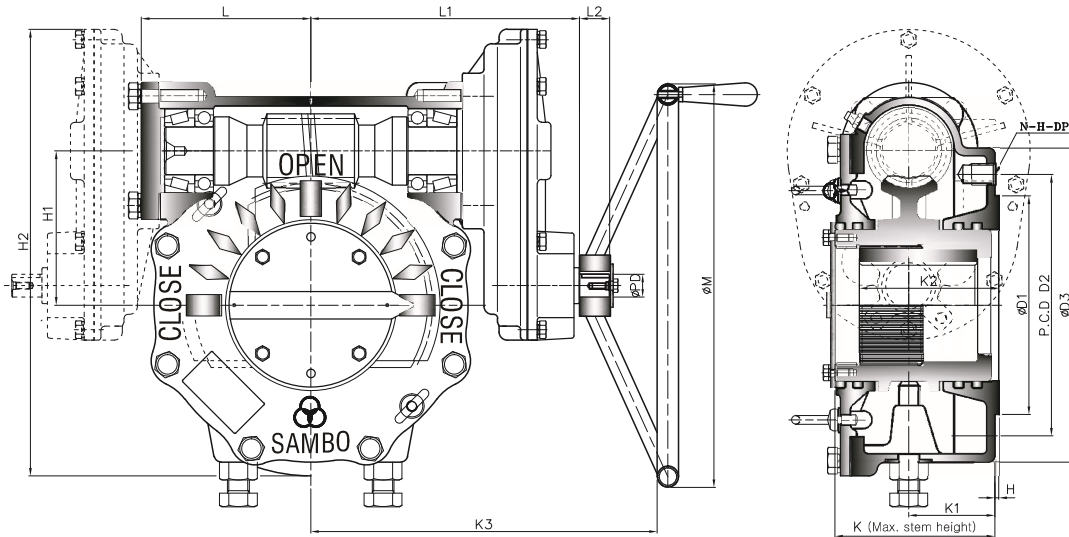
## ❖ Selection Chart for Manual Operation

MODEL	SIZE	GEAR RATIO	MAX. STEM ACCEPTANCE	MOUNTING OPTION & STANDARD	MAX. TORQUE CAPACITY		WEIGHT
					N-m	Ft. lbf	Kg
SBWG-BF		32 : 1	20 (6X6)	F-07	360	266	4
SBWG-0		36 : 1	28 (8X7)	F-07 , F-10	780	575	6
SBWG-00		40 : 1	36 (10X8)	F-10 , F-12	1200	885	10
SBWG-01		44 : 1	46 (14X9)	F-10 , F-12 , F-14	2000	1475	13
SBWG-02		48 : 1	60 (18X11)	F-12 , F-14 , F-16	2800	2065	21
SBWG-03		52 : 1	75 (20X12)	F-14 , F-16 , (F-20)	4300	3172	29
SBWG-35		52 : 1	80 (22X14)	F-16 , (F-20) , F-25	6100	4499	33
SBWG-04		56 : 1	95 (25X14)	F-16 , (F-20) , F-25	10400	7671	56
SBWG-05		60 : 1	115 (32X18)	F-25 , F-30	15900	11727	78
SBWG-55		62 : 1	125 (32X18)	F-25 , F-30	23500	17333	97
SBWG-06		64 : 1	140 (36X20)	F-25 , F-30 , F-35	32800	24192	147
SBWG-07		68 : 1	180 (45X25)	F-30 , F-35 , F-40	51100	37689	243
SBWG-75		66 : 1	210 (50X28)	F-35 , F-40 , F-48	81500	60111	350
SBWG-08		66 : 1	250 (56X32)	F-40 , F-48	121000	89245	473
SBWG-09		66 : 1	280 (63X32)	F-48 , F-60	192500	141981	830
SBWG-10		64 : 1	320 (70X36)	F-60	275000	202830	1330
SBWG-11		68 : 1	360 (80X40)	F-60	442000	326002	2085
SBWG-12		70 : 1	400 (90X45)	F-60 , (F-80)	610000	449913	2900
SBWG-13		72 : 1	440 (100X50)	F-60 , (F-80)	970000	715435	3800

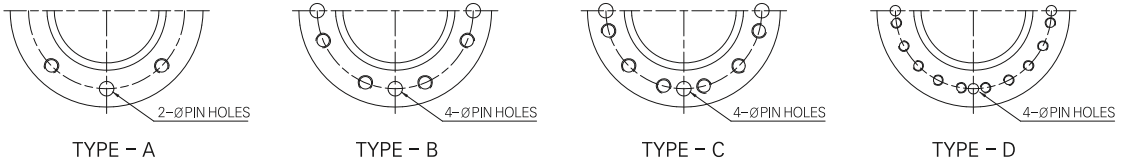
Size and component specification in this catalogue are subject to change without prior notice for quality improvement.

# STANDARD TYPE-A

## Horizontal Input with Single Reduction Gear Attachment



• Pin hole size is same as tap out diameter



### Dimension

UNIT : mm

DIM MODEL	BASE PART						EXTERNAL PART									INPUT SHAFT PART			HAND WHEEL
	TYPE	FLANGE	ØD1	P.C.D		ØD3	H	H1	H2	K	K1	K2	K3	L	L1	L2	ØPD	KEY	
				ØD2	N-H-DP														
SBWG-00-1S	A	F-12	85	125	4-M12-18	165	2	69.5	210	86.5	43	53.6	259	86	166	29	21	6X6	300
SBWG-01-1S		F-14	100	140	4-M16-24	190		82.5	235.5	96	53	65	288	95	175				400
SBWG-02-1S		F-16	130	165	4-M20-30	220		97	282	109.5	56	75.5	319	108	190.5				500
SBWG-03-1S	B	(F-16) F-20	160	205	8-M16-24	250	3	112	312	116	59	87	349	118	200.5	34	26	8X7	560
SBWG-35-1S		F-25	200	254	8-M16-24	300		127	339.5	126	63	91	367	125	212.5				630
SBWG-04-1S		F-25	200	254	8-M16-24	300		153	417.5	147	73	120	413	153	250				710
SBWG-05-1S		F-30	230	298	8-M20-30	350		180	469.5	155	78	141	443	163	260				800
SBWG-55-1S			350	202	516.5	162		80	144	463	183	280	900						
SBWG-06-1S		F-35	260	356	8-M30-45	415		230	621	200	109	175	552	117	349				800
SBWG-07-1S		F-40	300	406	8-M36-55	475		280.5	723	227	116	209	607	252	384				900
SBWG-75-1S	C	F-48	370	483	12-M36-55	560	5	326	860	246	120	220	721	279	485	58	50	16X10	1000
SBWG-08-1S						560		379	968	254	125	245	756	314	520				
SBWG-09-1S	D	F-60	470	603	20-M36-55	700	5	448.5	1107.5	284	138	270	796	354	560	58	50	16X10	1000
SBWG-10-1S						800		513	1291	352	164	330	927	426	691				
SBWG-11-1S						900		616.5	1499.5	400	181	370	969.5	468.5	733.5				
SBWG-12-1S						1000		711	1751	484	265	455	1140	554	905				
SBWG-13-1S						1000		809	1944	546	301	515	1190	609	955				



# Worm Gear Actuators

## ❖ Feature

- All mounting bases conform to ISO 5210/1 standards.
- All castings are ductile iron, Class 65-45-12 excellent strength and impact resistance.
- Worm gear material is available in two option.
  - ▶ Ductile iron, Class 80-55-06
  - ▶ Aluminum bronze, B148-C95800
- Worm is 1045 heat treated Carbon steel.
- Removable splined bushing to permit accurate positioning between gear drive and valve stem.
- Options include hand wheels, chain wheels and etc.

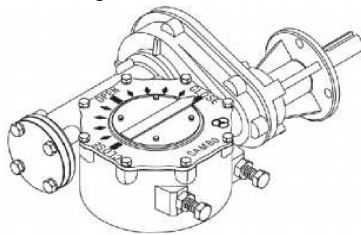
## Bushing Type

Splines permit accurate alignment of valve stem key.



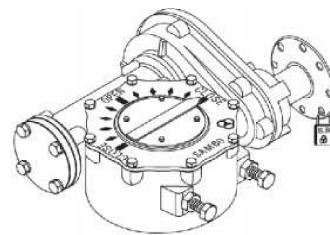
## M · O · V OPTION

Worm Gear can be provided with Motor actuator input flanges to accept standard ISO Mounting Base.



## LOCKING DEVICE OPTION

Input can be equipped with a Handwheel locking device for Manually operated units.



## ❖ Selection Chart for Manual Operation

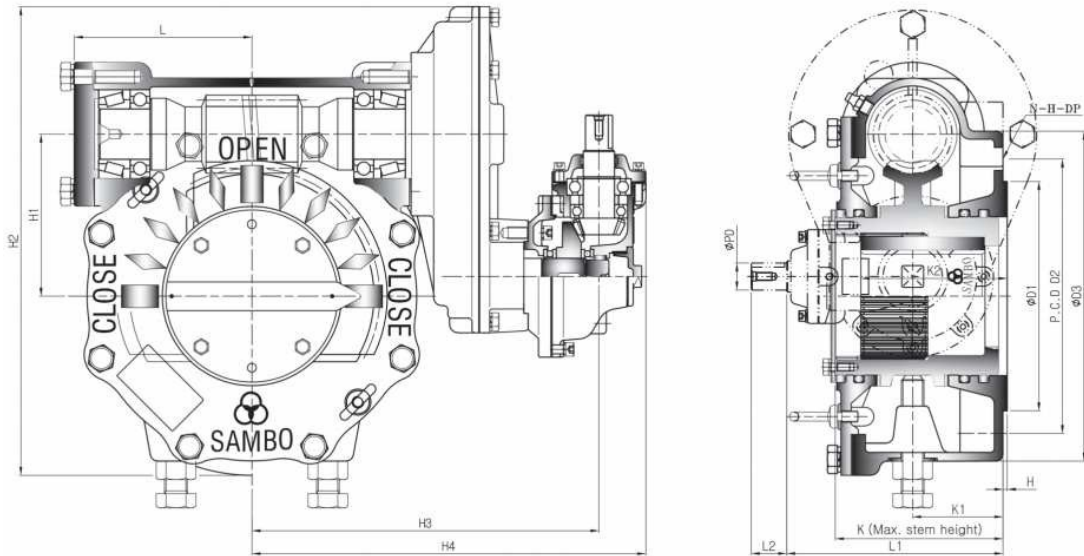
MODEL	SIZE	GEAR RATIO	MAX. STEM ACCEPTANCE	MOUNTING OPTION & STANDARD	MAX. TORQUE CAPACITY		WEIGHT
					N·m	Ft . lbf	Kg
SBWG-00-1S		80 : 1	36 (10X8)	F-10 , F-12	1200	885	12
SBWG-01-1S		88 : 1	46 (14X9)	F-10 , F-12 , F-14	2000	1475	15
SBWG-02-1S		121.6 : 1	60 (18X11)	F-12 , F-14 , F-16	2800	2065	25
SBWG-03-1S		131.7 : 1	75 (20X12)	F-14 , F-16 , (F-20)	4300	3172	33
SBWG-35-1S		131.7 : 1	80 (22X14)	F-16 , (F-20) , F-25	6100	4499	40
SBWG-04-1S		168 : 1	95 (25X14)	F-16 , (F-20) , F-25	10400	7671	66
SBWG-05-1S		180 : 1	115 (32X18)	F-25 , F-30	15900	11727	88
SBWG-55-1S		186 : 1	125 (32X18)	F-25 , F-30	23500	17333	107
SBWG-06-1S		256 : 1	140 (36X20)	F-25 , F-30 , F-35	32800	24192	175
SBWG-07-1S		272 : 1	180 (45X25)	F-30 , F-35 , F-40	51100	37689	271
SBWG-75-1S		330 : 1	210 (50X28)	F-35 , F-40 , F-48	81500	60111	422
SBWG-08-1S		330 : 1	250 (56X32)	F-40 , F-48	121000	89245	545
SBWG-09-1S		330 : 1	280 (63X32)	F-48 , F-60	192500	141981	902
SBWG-10-1S		320 : 1	320 (70X36)	F-60	275000	202830	1426
SBWG-11-1S		340 : 1	360 (80X40)	F-60	442000	326002	2182
SBWG-12-1S		350 : 1	400 (90X45)	F-60 , (F-80)	610000	449913	3081
SBWG-13-1S		360 : 1	440 (100X50)	F-60 , (F-80)	970000	715435	3980

Size and component specification in this catalogue are subject to change without prior notice for quality improvement.

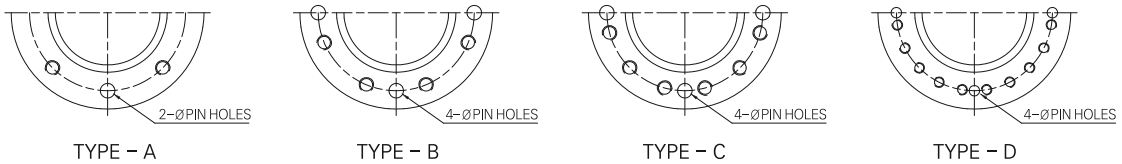


# STANDARD TYPE-B

## Vertical Input with Double Reduction Gear Attachment



• Pin hole size is same as tap out diameter



## Dimension

UNIT : mm

DIM MODEL	BASE PART						EXTERNAL PART										INPUT SHAFT PART			HAND WHEEL				
	TYPE	FLANGE	ØD1	P.C.D		ØD3	H	H1	H2	H3	H4	K	K1	K2	L	L1	L2	ØPD	KEY					
				ØD2	N-H-DP																			
SBWG-00-1S2B	A	F-12	85	125	4-M12-18	165	2	69.5	210	204	244	86.5	43	53.6	86	132	34	26	8X7	250				
SBWG-01-1S2B		F-14	100	140	4-M16-24	190		82.5	235.5	213	253	96	53	65	95	142								
SBWG-02-1S2B		F-16	130	165	4-M20-30	220		97	282	231.5	271.5	109.5	56	75.5	108	145								
SBWG-03-1S2B	B	(F-16) F-20	160	205	8-M16-24	250	3	112	312	241.5	281.5	116	59	87	118	148	34	26	8X7	250				
SBWG-35-1S2B		F-25	200	254	8-M16-24	300		127	339.5	259.5	299.5	126	63	91	125	152								
SBWG-04-1S2B		F-25	200	254	8-M16-24	300		153	417.5	308	358	147	73	120	153	194								
SBWG-05-1S2B		F-30	230	298	8-M20-30	350		180	469.5	318	368	155	78	141	163	199								
SBWG-55-1S2B			350	202	516.5	338		388	162	80	144	183	201											
SBWG-06-1S2B		F-35	260	356	8-M30-45	415		230	621	411.5	461.5	200	109	175	117	240					34	26	8X7	400
SBWG-07-1S2B		F-40	300	406	8-M36-55	475		280.5	723	446.5	496.5	227	116	209	252	246								
SBWG-75-1S2B	C	F-48	370	483	12-M36-55	560	5	326	860	558.5	623	246	120	220	279	308	34	32	10X8	630				
SBWG-08-1S2B						560		379	968	593	658	254	125	245	314	313								
SBWG-09-1S2B	D	F-60	470	603	20-M36-55	700	5	448.5	1107.5	633	698	284	138	270	354	326	34	32	10X8	630				
SBWG-10-1S2B						800		513	1291	839	904	352	164	330	426	384.5								
SBWG-11-1S2B						900		616.5	1499.5	881.5	946.5	400	181	370	468.5	401.5								
SBWG-12-1S2B						1000		711	1751	1070	1153	484	265	455	554	536								
SBWG-13-1S2B						1000		809	1944	1132	1203	546	301	515	609	592					44	38	12X8	800

# Worm Gear Actuators

## ❖ Feature

- All mounting bases conform to ISO 5210/1 standards.
- All castings are ductile iron, Class 65-45-12 excellent strength and impact resistance.
- Worm gear material is available in two option.
  - ▶ Ductile iron, Class 80-55-06
  - ▶ Aluminum bronze, B148-C95800
- Worm is 1045 heat treated Carbon steel.
- Removable splined bushing to permit accurate positioning between gear drive and valve stem.
- Options include hand wheels, chain wheels and etc.

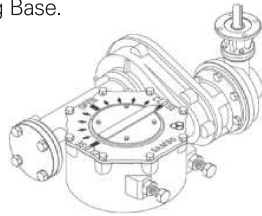
## Bushing Type

Splines permit accurate alignment of valve stem key.



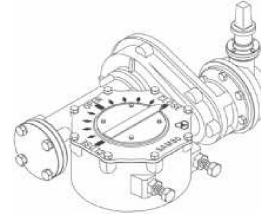
## M · O · V OPTION

Worm Gear can be provided with Motor actuator input flanges to accept standard ISO Mounting Base.



## SQUARE NUT OPTION

Input can be equipped with a Handwheel locking device for Manually operated units.



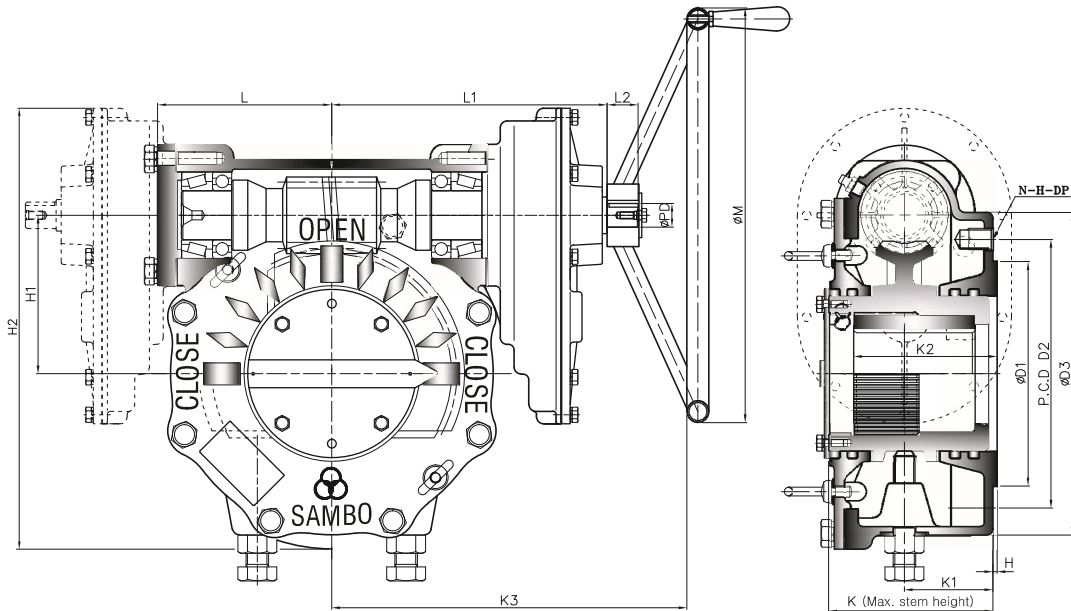
## ❖ Selection Chart for Manual Operation

MODEL	SIZE	GEAR RATIO	MAX. STEM ACCEPTANCE	MOUNTING OPTION & STANDARD	MAX. TORQUE CAPACITY		WEIGHT
					N-m	Ft . lbf	Kg
SBWG-00-1S2B		160 : 1	36 (10X8)	F-10 , F-12	1200	885	17
SBWG-01-1S2B		176 : 1	46 (14X9)	F-10 , F-12 , F-14	2000	1475	20
SBWG-02-1S2B		243.2 : 1	60 (18X11)	F-12 , F-14 , F-16	2800	2065	30
SBWG-03-1S2B		263.5 : 1	75 (20X12)	F-14 , F-16 , (F-20)	4300	3172	38
SBWG-35-1S2B		263.5 : 1	80 (22X14)	F-16 , (F-20) , F-25	6100	4499	55
SBWG-04-1S2B		420 : 1	95 (25X14)	F-16 , (F-20) , F-25	10400	7671	74
SBWG-05-1S2B		450 : 1	115 (32X18)	F-25 , F-30	15900	11727	96
SBWG-55-1S2B		465 : 1	125 (32X18)	F-25 , F-30	23500	17333	115
SBWG-06-1S2B		768 : 1	140 (36X20)	F-25 , F-30 , F-35	32800	24192	185
SBWG-07-1S2B		816 : 1	180 (45X25)	F-30 , F-35 , F-40	51100	37689	281
SBWG-75-1S2B		1320 : 1	210 (50X28)	F-35 , F-40 , F-48	81500	60111	450
SBWG-08-1S2B		1320 : 1	250 (56X32)	F-40 , F-48	121000	89245	573
SBWG-09-1S2B		1320 : 1	280 (63X32)	F-48 , F-60	192500	141981	930
SBWG-10-1S2B		1600 : 1	320 (70X36)	F-60	275000	202830	1470
SBWG-11-1S2B		1700 : 1	360 (80X40)	F-60	442000	326002	2260
SBWG-12-1S2B		1925 : 1	400 (90X45)	F-60 , (F-80)	610000	449913	3158
SBWG-13-1S2B		2160 : 1	440 (100X50)	F-60 , (F-80)	970000	715435	4079

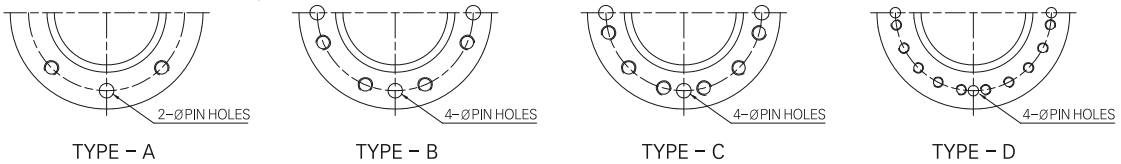
Size and component specification in this catalogue are subject to change without prior notice for quality improvement.

# STANDARD TYPE-A

## Horizontal Input with Double Reduction Gear Attachment



• Pin hole size is same as tap out diameter



### Dimension

UNIT : mm

DIM MODEL	BASE PART						EXTERNAL PART								INPUT SHAFT PART			HAND WHEEL						
	TYPE	FLANGE	ØD1	P.C.D		ØD3	H	H1	H2	K	K1	K2	K3	L	L1	L2	ØPD		KEY					
				ØD2	N-H-DP																			
SBWG-00-1SD	A	F-12	85	125	4-M12-18	165	2	69.5	210	86.5	43	53.6	276	86	183	29	21	6X6	300					
SBWG-01-1SD		F-14	100	140	4-M16-24	190		82.5	235.5	96	53	65	305	95	192				400					
SBWG-02-1SD		F-16	130	165	4-M20-30	220		97	282	109.5	56	75.5	343	108	214.5				500					
SBWG-03-1SD	B	(F-16) F-20	160	205	8-M16-24	250	3	112	312	116	59	87	373	118	224.5	34	26	8X7	560					
SBWG-35-1SD		F-25	200	254	8-M16-24	300		127	339.5	126	63	91	391	125	236.5				630					
SBWG-04-1SD		F-25	200	254	8-M16-24	300		153	417.5	147	73	120	449	153	286				710					
SBWG-05-1SD		F-30	230	298	8-M20-30	350		180	469.5	155	78	141	479	163	296				800					
SBWG-55-1SD		F-30	230	298	8-M20-30	350		202	516.5	162	80	144	499	183	316				900					
SBWG-06-1SD		F-35	260	356	8-M30-45	415		230	621	200	109	175	579	117	376				1000					
SBWG-07-1SD		F-40	300	406	8-M36-55	475		280.5	723	227	116	209	634	252	411				900					
SBWG-75-1SD		C	F-48	370	483	12-M36-55		560	5	326	860	246	120	220	767				279	531	58	50	16X10	1000
SBWG-08-1SD			F-48	370	483	12-M36-55		560		379	968	254	125	245	802				314	566				
SBWG-09-1SD		D	F-60	470	603	20-M36-55		700	5	448.5	1107.5	284	138	270	842				354	606	58	50	16X10	1000
SBWG-10-1SD	800						513	1291		352	164	330	982	426	746									
SBWG-11-1SD	900						616.5	1499.5		400	181	370	1039.5	468.5	788.5									
SBWG-12-1SD	1000						711	1751		484	265	455	1205	554	969									
SBWG-13-1SD	1000						809	1944		546	301	515	1245	609	1009									

# Worm Gear Actuators

## ❖ Feature

- All mounting bases conform to ISO 5210/1 standards.
- All castings are ductile iron, Class 65-45-12 excellent strength and impact resistance.
- Worm gear material is available in two option.
  - ▶ Ductile iron, Class 80-55-06
  - ▶ Aluminum bronze, B148-C95800
- Worm is 1045 heat treated Carbon steel.
- Removable splined bushing to permit accurate positioning between gear drive and valve stem.
- Options include hand wheels, chain wheels and etc.

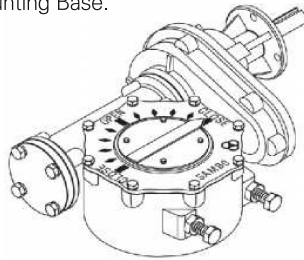
## Bushing Type

Splines permit accurate alignment of valve stem key.



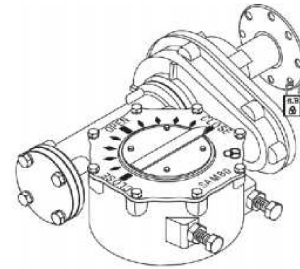
## M · O · V OPTION

Worm Gear can be provided with Motor actuator input flanges to accept standard ISO Mounting Base.



## LOCKING DEVICE OPTION

Input can be equipped with a Handwheel locking device for Manually operated units.



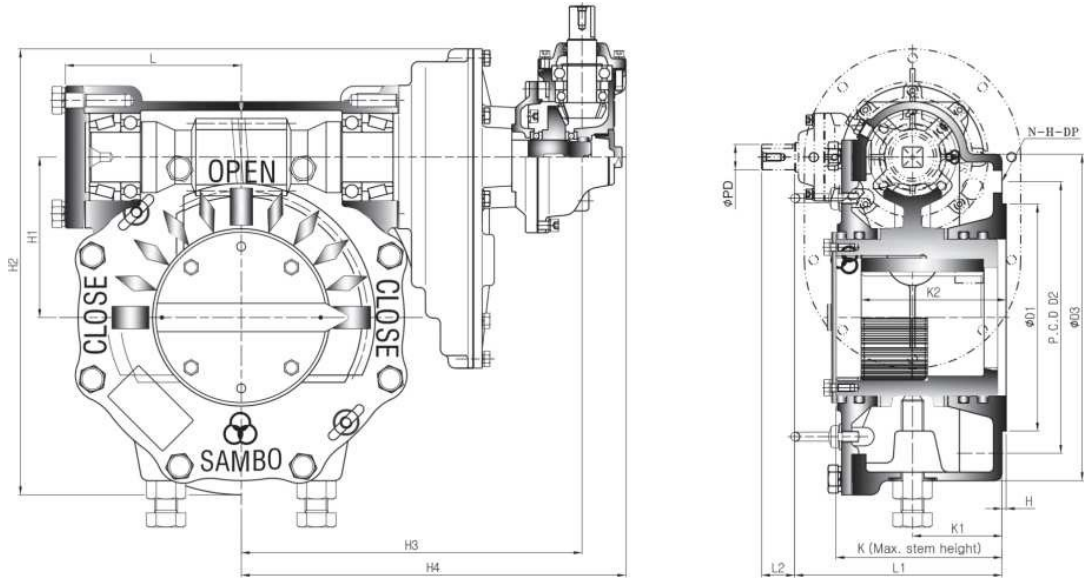
## ❖ Selection Chart for Manual Operation

MODEL	SIZE	MAX. GEAR RATIO (Changeable)	MAX. STEM ACCEPTANCE	MOUNTING OPTION & STANDARD	MAX. TORQUE CAPACITY		WEIGHT
					N-m	Ft. lbf	Kg
SBWG-00-1SD		160 : 1	36 (10X8)	F-10 , F-12	1200	885	14
SBWG-01-1SD		176 : 1	46 (14X9)	F-10 , F-12 , F-14	2000	1475	17
SBWG-02-1SD		308 : 1	60 (18X11)	F-12 , F-14 , F-16	2800	2065	27
SBWG-03-1SD		333.7 : 1	75 (20X12)	F-14 , F-16 , (F-20)	4300	3172	35
SBWG-35-1SD		333.7 : 1	80 (22X14)	F-16 , (F-20) , F-25	6100	4499	42
SBWG-04-1SD		504 : 1	95 (25X14)	F-16 , (F-20) , F-25	10400	7671	71
SBWG-05-1SD		540 : 1	115 (32X18)	F-25 , F-30	15900	11727	93
SBWG-55-1SD		558 : 1	125 (32X18)	F-25 , F-30	23500	17333	112
SBWG-06-1SD		1024 : 1	140 (36X20)	F-25 , F-30 , F-35	32800	24192	188
SBWG-07-1SD		1088 : 1	180 (45X25)	F-30 , F-35 , F-40	51100	37689	284
SBWG-75-1SD		1650 : 1	210 (50X28)	F-35 , F-40 , F-48	81500	60111	450
SBWG-08-1SD		1650 : 1	250 (56X32)	F-40 , F-48	121000	89245	573
SBWG-09-1SD		1650 : 1	280 (63X32)	F-48 , F-60	192500	141981	930
SBWG-10-1SD		1600 : 1	320 (70X36)	F-60	275000	202830	1464
SBWG-11-1SD		1700 : 1	360 (80X40)	F-60	442000	326002	2220
SBWG-12-1SD		1750 : 1	400 (90X45)	F-60 , (F-80)	610000	449913	3081
SBWG-13-1SD		1800 : 1	440 (100X50)	F-60 , (F-80)	970000	715435	3980

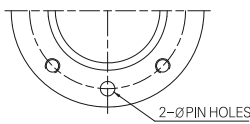
Size and component specification in this catalogue are subject to change without prior notice for quality improvement.

# STANDARD TYPE-B

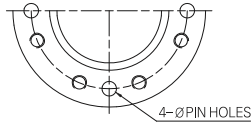
## Vertical Input with Triple Reduction Gear Attachment



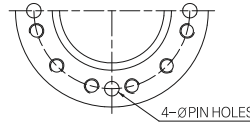
• Pin hole size is same as tap out diameter



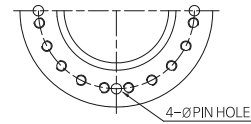
TYPE - A



TYPE - B



TYPE - C



TYPE - D

## Dimension

UNIT : mm

MODEL	DIM	BASE PART						EXTERNAL PART									INPUT SHAFT PART			HAND WHEEL				
		TYPE	FLANGE	ØD1	P.C.D		ØD3	H	H1	H2	H3	H4	K	K1	K2	L	L1	L2	ØPD		KEY			
					ØD2	N-H-DP																		
SBWG-00-1SD2B	A	F-12	85	125	4-M12-18	165	2	69.5	210	221	261	86.5	43	53.6	86	132	34	26	8X7	250				
SBWG-01-1SD2B		F-14	100	140	4-M16-24	190		82.5	235.5	230	270	96	53	65	95	142								
SBWG-02-1SD2B		F-16	130	165	4-M20-30	220		97	282	255.5	295.5	109.5	56	75.5	108	145								
SBWG-03-1SD2B	B	(F-16) F-20	160	205	8-M16-24	250	3	112	312	265.5	305.5	116	59	87	118	148	34	26	8X7	250				
SBWG-35-1SD2B		F-25	200	254	8-M16-24	300		127	339.5	277.5	317.5	126	63	91	125	152								
SBWG-04-1SD2B		F-25	200	254	8-M16-24	300		153	417.5	344	394	147	73	120	153	194								
SBWG-05-1SD2B		F-30	230	298	8-M20-30	350		180	469.5	354	404	155	78	141	163	199								
SBWG-55-1SD2B			350	202	516.5	374		424	162	80	144	183	201											
SBWG-06-1SD2B		F-35	260	356	8-M30-45	415		230	621	438.5	488.5	200	109	175	117	240					34	26	8X7	400
SBWG-07-1SD2B		F-40	300	406	8-M36-55	475		280.5	723	473.5	523.5	227	116	209	252	246								
SBWG-75-1SD2B		C	F-48	370	483	12-M36-55		560	5	326	860	618.5	683.5	246	120	220					279	308	34	32
SBWG-08-1SD2B	560						379	968		653.5	718.5	254	125	245	314	313								
SBWG-09-1SD2B	D	F-60	470	603	20-M36-55	700	5	448.5	1107.5	693.5	758.5	284	138	270	354	326	34	32	10X8	630				
SBWG-10-1SD2B						800		513	1291	893	958	352	164	330	426	384.5								
SBWG-11-1SD2B						900		616.5	1499.5	935.5	1000.5	400	181	370	468.5	401.5								
SBWG-12-1SD2B						1000		711	1751	1135	1217.5	484	265	455	554	536					44	38	12X8	800
SBWG-13-1SD2B																								



# Worm Gear Actuators

## ❖ Feature

- All mounting bases conform to ISO 5210/1 standards.
- All castings are ductile iron, Class 65-45-12 excellent strength and impact resistance.
- Worm gear material is available in two option.
  - ▶ Ductile iron, Class 80-55-06
  - ▶ Aluminum bronze, B148-C95800
- Worm is 1045 heat treated Carbon steel.
- Removable splined bushing to permit accurate positioning between gear drive and valve stem.
- Options include hand wheels, chain wheels and etc.

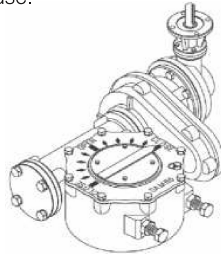
## Bushing Type

Splines permit accurate alignment of valve stem key.



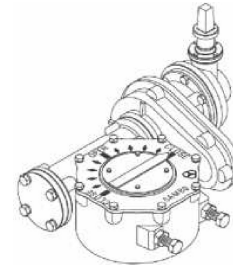
## M · O · V OPTION

Worm Gear can be provided with Motor actuator input flanges to accept standard ISO Mounting Base.



## SQUARE NUT OPTION

Input can be equipped with a Handwheel locking device for Manually operated units.



## ❖ Selection Chart for Manual Operation

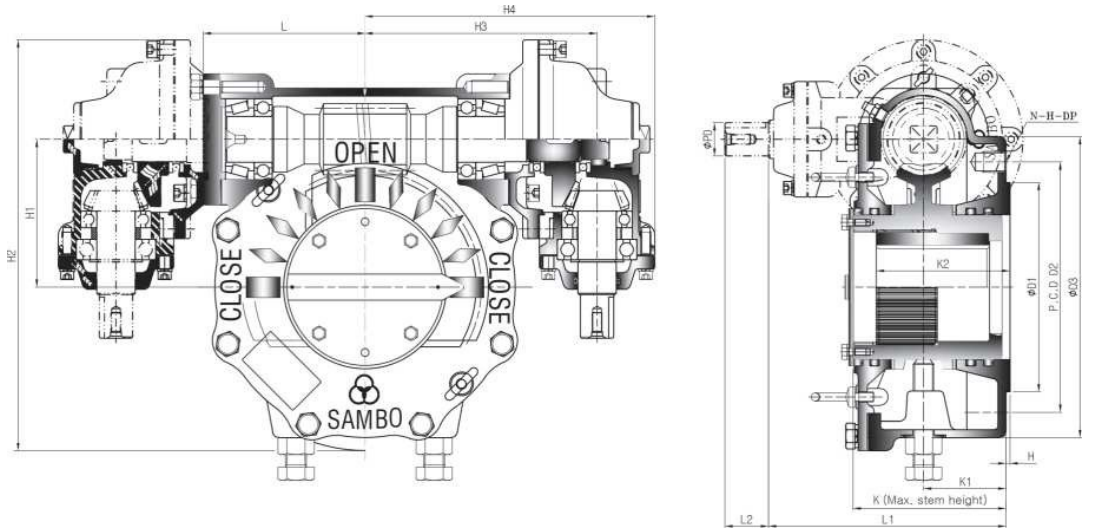
MODEL \ SIZE	MAX. GEAR RATIO (Change Able)	MAX. STEM ACCEPTANCE	MOUNTING OPTION & STANDARD	MAX. TORQUE CAPACITY		WEIGHT
				N-m	Ft. lbf	Kg
SBWG-00-1SD2B	320 : 1	36 (10X8)	F-10, F-12	1200	885	19
SBWG-01-1SD2B	352 : 1	46 (14X9)	F-10, F-12, F-14	2000	1475	22
SBWG-02-1SD2B	616 : 1	60 (18X11)	F-12, F-14, F-16	2800	2065	32
SBWG-03-1SD2B	667.4 : 1	75 (20X12)	F-14, F-16, (F-20)	4300	3172	40
SBWG-35-1SD2B	667.4 : 1	80 (22X14)	F-16, (F-20), F-25	6100	4499	57
SBWG-04-1SD2B	1260 : 1	95 (25X14)	F-16, (F-20), F-25	10400	7671	79
SBWG-05-1SD2B	1350 : 1	115 (32X18)	F-25, F-30	15900	11727	101
SBWG-55-1SD2B	1395 : 1	125 (32X18)	F-25, F-30	23500	17333	120
SBWG-06-1SD2B	3072 : 1	140 (36X20)	F-25, F-30, F-35	32800	24192	198
SBWG-07-1SD2B	3264 : 1	180 (45X25)	F-30, F-35, F-40	51100	37689	294
SBWG-75-1SD2B	6600 : 1	210 (50X28)	F-35, F-40, F-48	81500	60111	478
SBWG-08-1SD2B	6600 : 1	250 (56X32)	F-40, F-48	121000	89245	602
SBWG-09-1SD2B	6600 : 1	280 (63X32)	F-48, F-60	192500	141981	958
SBWG-10-1SD2B	8000 : 1	320 (70X36)	F-60	275000	202830	1508
SBWG-11-1SD2B	8500 : 1	360 (80X40)	F-60	442000	326002	2264
SBWG-12-1SD2B	9625 : 1	400 (90X45)	F-60, (F-80)	610000	449913	3158
SBWG-13-1SD2B	10800 : 1	440 (100X50)	F-60, (F-80)	970000	715435	4079

Size and component specification in this catalogue are subject to change without prior notice for quality improvement.

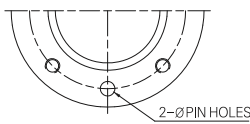


# STANDARD TYPE-B

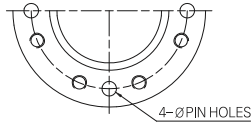
## Vertical Input with Single Reduction Gear Attachment



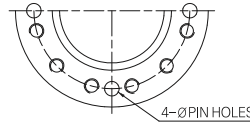
• Pin hole size is same as tap out diameter



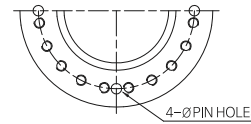
TYPE - A



TYPE - B



TYPE - C



TYPE - D

## Dimension

UNIT : mm

MODEL	DIM	BASE PART						EXTERNAL PART								INPUT SHAFT PART			HAND WHEEL					
		TYPE	FLANGE	ØD1	P.C.D		ØD3	H	H1	H2	H3	H4	K	K1	K2	L	L1	L2		ØP	KEY			
					ØD2	N-H-DP																		
SBWG-00-2B	A	F-12	85	125	4-M12-18	165	2	69.5	214.5	126	166	86.5	43	53.6	86	132	34	26	8X7	250				
SBWG-01-2B		F-14	100	140	4-M16-24	190		82.5	240	135	175	96	53	65	95	142								
SBWG-02-2B		F-16	130	165	4-M20-30	220		97	284.5	164	214	109.5	56	75.5	108	177								
SBWG-03-2B	B	(F-16) F-20	160	205	8-M16-24	250	3	112	314.5	174	224	116	59	87	118	180	34	26	8X7	300				
SBWG-35-2B		F-25	200	254	8-M16-24	300		127	342	192	242	126	63	91	125	184								
SBWG-04-2B		F-25	200	254	8-M16-24	300		153	406.5	212.5	262.5	147	73	120	153	204								
SBWG-05-2B		F-30	230	298	8-M20-30	350		180	458.5	222.5	272.5	155	78	141	163	209								
SBWG-55-2B			350	202	505.5	242.5		292.5	162	80	144	183	211											
SBWG-06-2B		F-35	260	356	8-M30-45	415		230	598.5	312	377	200	109	175	117	297					34	32	10X8	630
SBWG-07-2B		F-40	300	406	8-M36-55	475		280.5	700.5	347	412	227	116	209	252	303								
SBWG-75-2B	C	F-48	370	483	12-M36-55	560	5	326	818.5	414	479	246	120	220	279	328	34	32	10X8	710				
SBWG-08-2B						560		379	954	498	580.5	254	125	245	314	391					44	38	12X8	800
SBWG-09-2B	D	F-60	470	603	20-M36-55	700	5	448.5	1118.5	550	632.5	284	138	270	354	429	44	38	12X8	900				
SBWG-10-2B						800		513	1281	742	824.5	352	164	330	426	477								
SBWG-11-2B						900		616.5	1489.5	784.5	867	400	181	370	468.5	494								
SBWG-12-2B						1000		711	1711	886	986	484	265	455	554	651								
SBWG-13-2B						1000		809	1941.5	947	1047	546	301	515	609	710					58	50	16X10	1000

# Worm Gear Actuators

## ❖ Feature

- All mounting bases conform to ISO 5210/1 standards.
- All castings are ductile iron, Class 65-45-12 excellent strength and impact resistance.
- Worm gear material is available in two option.
  - ▶ Ductile iron, Class 80-55-06
  - ▶ Aluminum bronze, B148-C95800
- Worm is 1045 heat treated Carbon steel.
- Removable splined bushing to permit accurate positioning between gear drive and valve stem.
- Options include hand wheels, chain wheels and etc.

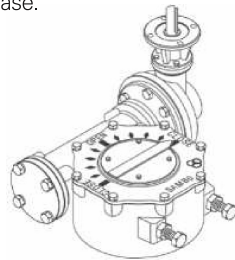
## Bushing Type

Splines permit accurate alignment of valve stem key.



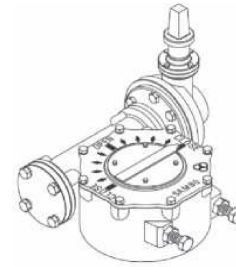
## M · O · V OPTION

Worm Gear can be provided with Motor actuator input flanges to accept standard ISO Mounting Base.



## SQUARE NUT OPTION

Input can be equipped with a Handwheel locking device for Manually operated units.



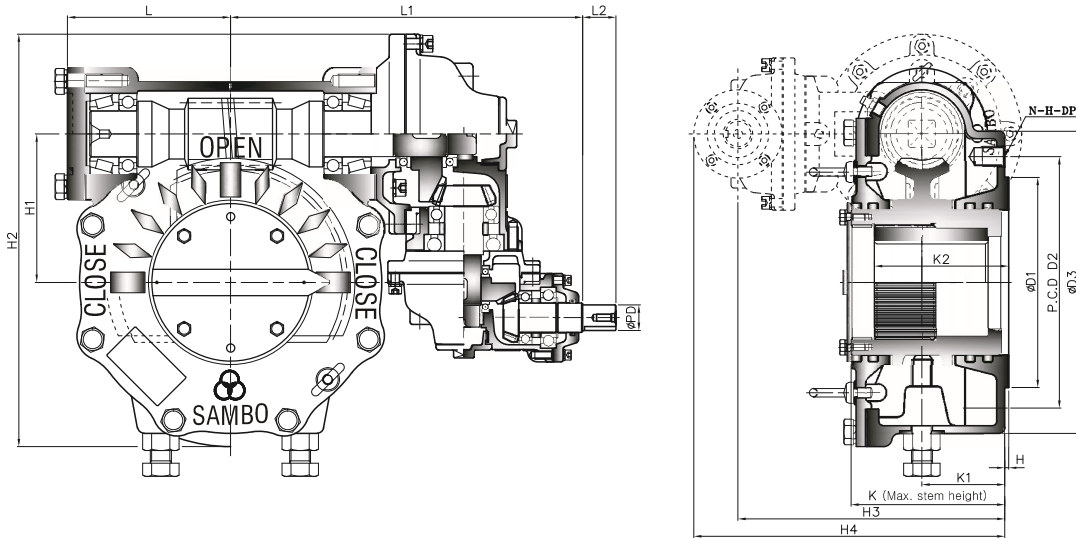
## ❖ Selection Chart for Manual Operation

MODEL \ SIZE	GEAR RATIO	MAX. STEM ACCEPTANCE	MOUNTING OPTION & STANDARD	MAX. TORQUE CAPACITY		WEIGHT
				N-m	Ft . lbf	Kg
SBWG-00-2B	80 : 1	36 (10X8)	F-10 , F-12	1200	885	15
SBWG-01-2B	88 : 1	46 (14X9)	F-10 , F-12 , F-14	2000	1475	18
SBWG-02-2B	120 : 1	60 (18X11)	F-12 , F-14 , F-16	2800	2065	29
SBWG-03-2B	130 : 1	75 (20X12)	F-14 , F-16 , (F-20)	4300	3172	37
SBWG-35-2B	130 : 1	80 (22X14)	F-16 , (F-20) , F-25	6100	4499	48
SBWG-04-2B	168 : 1	95 (25X14)	F-16 , (F-20) , F-25	10400	7671	66
SBWG-05-2B	180 : 1	115 (32X18)	F-25 , F-30	15900	11727	88
SBWG-55-2B	186 : 1	125 (32X18)	F-25 , F-30	23500	17333	107
SBWG-06-2B	256 : 1	140 (36X20)	F-25 , F-30 , F-35	32800	24192	175
SBWG-07-2B	272 : 1	180 (45X25)	F-30 , F-35 , F-40	51100	37689	271
SBWG-75-2B	330 : 1	210 (50X28)	F-35 , F-40 , F-48	81500	60111	390
SBWG-08-2B	363 : 1	250 (56X32)	F-40 , F-48	121000	89245	544
SBWG-09-2B	396 : 1	280 (63X32)	F-48 , F-60	192500	141981	920
SBWG-10-2B	416 : 1	320 (70X36)	F-60	275000	202830	1483
SBWG-11-2B	442 : 1	360 (80X40)	F-60	442000	326002	2239
SBWG-12-2B	490 : 1	400 (90X45)	F-60 , (F-80)	610000	449913	3116
SBWG-13-2B	544 : 1	440 (100X50)	F-60 , (F-80)	970000	715435	4118

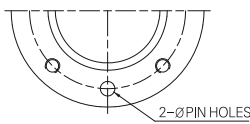
Size and component specification in this catalogue are subject to change without prior notice for quality improvement.

# STANDARD TYPE-C

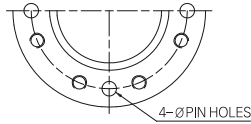
## Horizontal Input with Double Reduction Gear Attachment



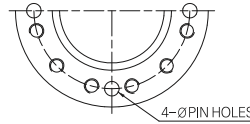
• Pin hole size is same as tap out diameter



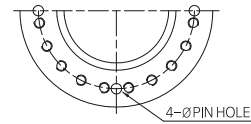
TYPE - A



TYPE - B



TYPE - C



TYPE - D

## Dimension

UNIT : mm

DIM MODEL	BASE PART						EXTERNAL PART										INPUT SHAFT PART			HAND WHEEL
	TYPE	FLANGE	ØD1	P.C.D		ØD3	H	H1	H2	H3	H4	K	K1	K2	L	L1	L2	ØP	KEY	
				ØD2	N-H-DP															
SBWG-00-2BD	A	F-12	85	125	4-M12-18	165	2	69.5	214.5	162	202	86.5	43	53.6	86	215	34	26	8X7	250
SBWG-01-2BD		F-14	100	140	4-M16-24	190		82.5	240	172	212	96	53	65	95	224				
SBWG-02-2BD		F-16	130	165	4-M20-30	220		97	284.5	202	242	109.5	56	75.5	108	253				
SBWG-03-2BD	B	(F-16) F-20	160	205	8-M16-24	250	3	112	314.5	205	245	116	59	87	118	263	34	26	8X7	250
SBWG-35-2BD		F-25	200	254	8-M16-24	300		127	342	209	249	126	63	91	125	281				
SBWG-04-2BD		F-25	200	254	8-M16-24	300		153	406.5	242	292	147	73	120	153	333.5				
SBWG-05-2BD		F-30	230	298	8-M20-30	350		180	458.5	247	297	155	78	141	163	343.5				
SBWG-55-2BD			350	202	505.5	249		299	162	80	144	183	363.5							
SBWG-06-2BD		F-35	260	356	8-M30-45	415		230	598.5	332.5	382.5	200	109	175	117	442.5				
SBWG-07-2BD		F-40	300	406	8-M36-55	475		280.5	700.5	338.5	388.5	227	116	209	252	503.5				
SBWG-75-2BD	C	F-48	370	483	12-M36-55	560	5	326	818.5	446.5	496.5	246	120	220	279	566	34	32	10X8	630
SBWG-08-2BD								379	954	475	530	254	125	245	314	678				
SBWG-09-2BD	D	F-60	470	603	20-M36-55	700	5	448.5	1118.5	496.5	561.5	284	138	270	354	738	34	32	10X8	710
SBWG-10-2BD						800		513	1281	563	628	352	164	330	426	922				
SBWG-11-2BD						900		616.5	1489.5	580	645	400	181	370	468.5	965.5				
SBWG-12-2BD						1000		711	1711	771	853.5	484	265	455	554	1152				
SBWG-13-2BD						1000		809	1941.5	842	924.5	546	301	515	609	1238				

# Worm Gear Actuators

## ❖ Feature

- All mounting bases conform to ISO 5210/1 standards.
- All castings are ductile iron, Class 65-45-12 excellent strength and impact resistance.
- Worm gear material is available in two option.
  - ▶ Ductile iron, Class 80-55-06
  - ▶ Aluminum bronze, B148-C95800
- Worm is 1045 heat treated Carbon steel.
- Removable splined bushing to permit accurate positioning between gear drive and valve stem.
- Options include hand wheels, chain wheels and etc.

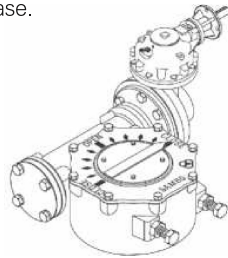
## Bushing Type

Splines permit accurate alignment of valve stem key.



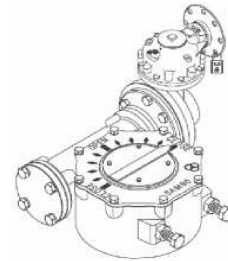
## M · O · V OPTION

Worm Gear can be provided with Motor actuator input flanges to accept standard ISO Mounting Base.



## LOCKING DEVICE OPTION

Input can be equipped with a Handwheel locking device for Manually operated units.



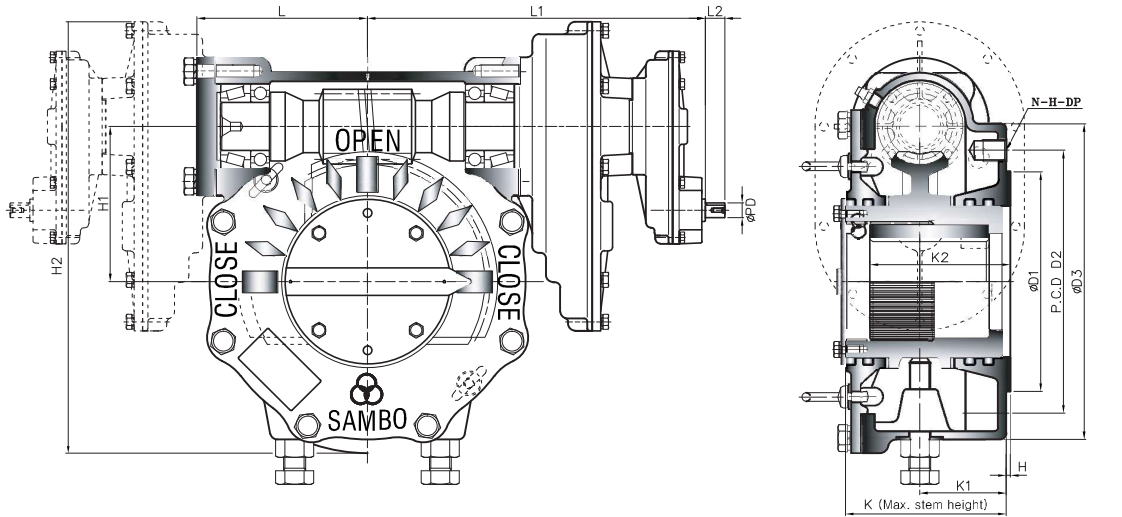
## ❖ Selection Chart for Manual Operation

MODEL	SIZE	GEAR RATIO	MAX. STEM ACCEPTANCE	MOUNTING OPTION & STANDARD	MAX. TORQUE CAPACITY		WEIGHT
					N-m	Ft. lbf	Kg
SBWG-00-2BD		160 : 1	36 (10X8)	F-10, F-12	1200	885	20
SBWG-01-2BD		176 : 1	46 (14X9)	F-10, F-12, F-14	2000	1475	23
SBWG-02-2BD		240 : 1	60 (18X11)	F-12, F-14, F-16	2800	2065	34
SBWG-03-2BD		260 : 1	75 (20X12)	F-14, F-16, (F-20)	4300	3172	42
SBWG-35-2BD		260 : 1	80 (22X14)	F-16, (F-20), F-25	6100	4499	53
SBWG-04-2BD		420 : 1	95 (25X14)	F-16, (F-20), F-25	10400	7671	74
SBWG-05-2BD		450 : 1	115 (32X18)	F-25, F-30	15900	11727	96
SBWG-55-2BD		465 : 1	125 (32X18)	F-25, F-30	23500	17333	115
SBWG-06-2BD		768 : 1	140 (36X20)	F-25, F-30, F-35	32800	24192	185
SBWG-07-2BD		816 : 1	180 (45X25)	F-30, F-35, F-40	51100	37689	281
SBWG-75-2BD		990 : 1	210 (50X28)	F-35, F-40, F-48	81500	60111	404
SBWG-08-2BD		1270.5 : 1	250 (56X32)	F-40, F-48	121000	89245	564
SBWG-09-2BD		1584 : 1	280 (63X32)	F-48, F-60	192500	141981	950
SBWG-10-2BD		2080 : 1	320 (70X36)	F-60	275000	202830	1523
SBWG-11-2BD		2210 : 1	360 (80X40)	F-60	442000	326002	2279
SBWG-12-2BD		2695 : 1	400 (90X45)	F-60, (F-80)	610000	449913	3187
SBWG-13-2BD		3264 : 1	440 (100X50)	F-60, (F-80)	970000	715435	4217

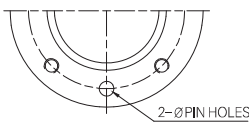
Size and component specification in this catalogue are subject to change without prior notice for quality improvement.

# STANDARD TYPE-A

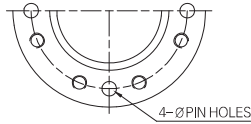
## Horizontal Input with Triple Reduction Gear Attachment



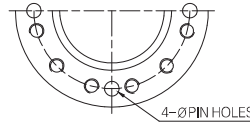
• Pin hole size is same as tap out diameter



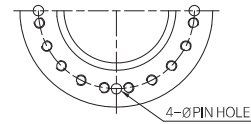
TYPE - A



TYPE - B



TYPE - C



TYPE - D

## Dimension

UNIT : mm

DIM MODEL	TYPE	FLANGE	BASE PART				EXTERNAL PART						INPUT SHAFT PART			H AND WHEEL					
			ØD1	P.C.D		ØD3	H	H1	H2	K	K1	K2	L	L1	L2		ØPD	KEY			
				ØD2	N-H-DP																
SBWG-00-2SD	A	F-12	85	125	4-M12-18	165	2	69.5	210	86.5	43	53.6	86	261	29	21	6X6	300			
SBWG-01-2SD		F-14	100	140	4-M16-24	190		82.5	235.5	96	53	65	95	270				400			
SBWG-02-2SD		F-16	130	165	4-M20-30	220		97	282	109.5	56	75.5	108	295.5				34	21	8X7	500
SBWG-03-2SD	B	(F-16) F-20	160	205	8-M16-24	250	3	112	312	116	59	87	118	305.5	34	21	8X7	560			
SBWG-35-2SD		F-25	200	254	8-M16-24	300		127	339.5	126	63	91	125	317.5				630			
SBWG-04-2SD		F-25	200	254	8-M16-24	300		153	417.5	147	73	120	153	364.5				710			
SBWG-05-2SD		F-30	230	298	8-M20-30	350		180	469.5	155	78	141	163	374.5				800			
SBWG-55-2SD			350	202	516.5	162		80	144	183	394.5	900									
SBWG-06-2SD		F-35	260	356	8-M30-45	415		230	621	200	109	175	117	471				34	32	12X8	800
SBWG-07-2SD		F-40	300	406	8-M36-55	475		280.5	723	227	116	209	252	506				34	32	12X8	900
SBWG-75-2SD	C	F-48	370	483	12-M36-55	560	5	326	860	246	120	220	279	662	44	38	16X10	1000			
SBWG-08-2SD						560		379	968	254	125	245	314	697							
SBWG-09-2SD	D	F-60	470	603	20-M36-55	700	5	448.5	1107.5	284	138	270	354	737	58	50	16X10	1000			
SBWG-10-2SD						800		513	1291	352	164	330	426	959							
SBWG-11-2SD						900		616.5	1499.5	400	181	370	468.5	1001.5							
SBWG-12-2SD						1000		711	1751	484	265	455	554	1255							
SBWG-13-2SD						1000		809	1944	546	301	515	609	1295							



# Worm Gear Actuators

## ❖ Feature

- All mounting bases conform to ISO 5210/1 standards.
- All castings are ductile iron, Class 65-45-12 excellent strength and impact resistance.
- Worm gear material is available in two option.
  - ▶ Ductile iron, Class 80-55-06
  - ▶ Aluminum bronze, B148-C95800
- Worm is 1045 heat treated Carbon steel.
- Removable splined bushing to permit accurate positioning between gear drive and valve stem.
- Options include hand wheels, chain wheels and etc.

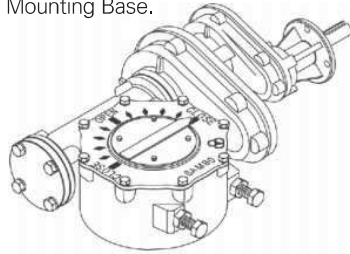
## Bushing Type

Splines permit accurate alignment of valve stem key.



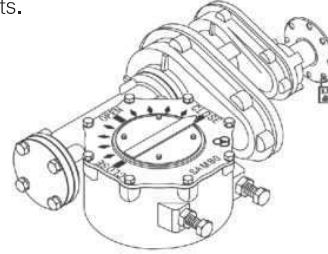
## M · O · V OPTION

Worm Gear can be provided with Motor actuator input flanges to accept standard ISO Mounting Base.



## LOCKING DEVICE OPTION

Input can be equipped with a Handwheel locking device for Manually operated units.



## ❖ Selection Chart for Manual Operation

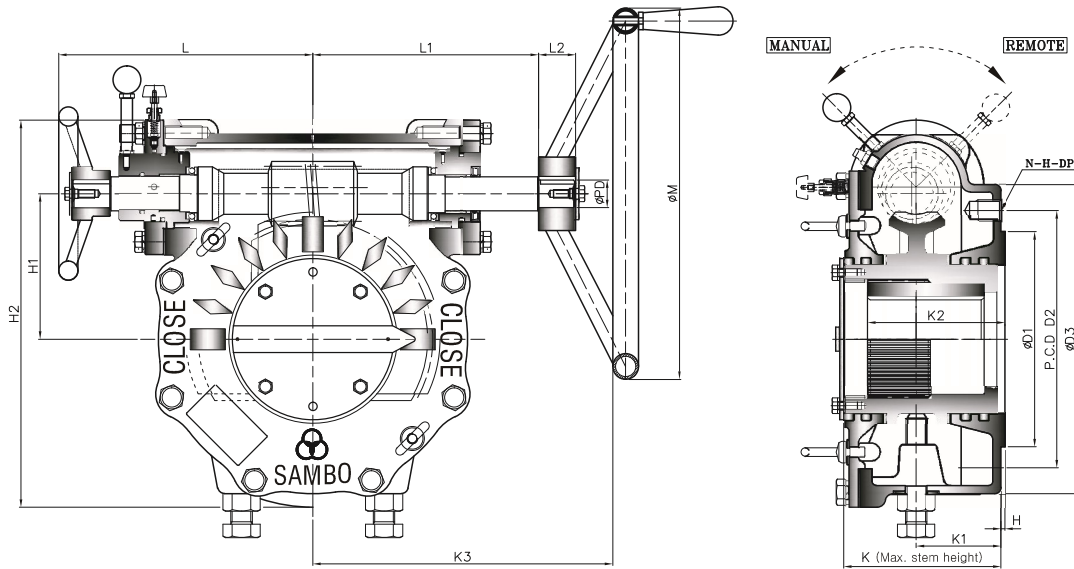
MODEL	SIZE	GEAR RATIO (Changeable)	MAX. STEM ACCEPTANCE	MOUNTING OPTION & STANDARD	MAX. TORQUE CAPACITY		WEIGHT
					N·m	Ft . lbf	Kg
SBWG-00-2SD		320 : 1	36 (10X8)	F-10 , F-12	1200	885	16
SBWG-01-2SD		352 : 1	46 (14X9)	F-10 , F-12 , F-14	2000	1475	19
SBWG-02-2SD		616 : 1	60 (18X11)	F-12 , F-14 , F-16	2800	2065	29
SBWG-03-2SD		667.4 : 1	75 (20X12)	F-14 , F-16 , (F-20)	4300	3172	38
SBWG-35-2SD		667.4 : 1	80 (22X14)	F-16 , (F-20) , F-25	6100	4499	60
SBWG-04-2SD		1276.8 : 1	95 (25X14)	F-16 , (F-20) , F-25	10400	7671	75
SBWG-05-2SD		1368 : 1	115 (32X18)	F-25 , F-30	15900	11727	97
SBWG-55-2SD		1413.6 : 1	125 (32X18)	F-25 , F-30	23500	17333	116
SBWG-06-2SD		3072 : 1	140 (36X20)	F-25 , F-30 , F-35	32800	24192	198
SBWG-07-2SD		3264 : 1	180 (45X25)	F-30 , F-35 , F-40	51100	37689	294
SBWG-75-2SD		6600 : 1	210 (50X28)	F-35 , F-40 , F-48	81500	60111	478
SBWG-08-2SD		6600 : 1	250 (56X32)	F-40 , F-48	121000	89245	601
SBWG-09-2SD		6600 : 1	280 (63X32)	F-48 , F-60	192500	141981	957
SBWG-10-2SD		8000 : 1	320 (70X36)	F-60	275000	202830	1536
SBWG-11-2SD		8500 : 1	360 (80X40)	F-60	442000	326002	2292
SBWG-12-2SD		8750 : 1	400 (90X45)	F-60 , (F-80)	610000	449913	3178
SBWG-13-2SD		9000 : 1	440 (100X50)	F-60 , (F-80)	970000	715435	4077

Size and component specification in this catalogue are subject to change without prior notice for quality improvement.

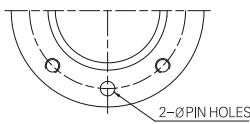


# DECLUTCH GEAR

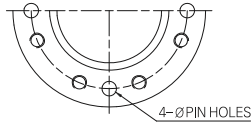
## Horizontal Input



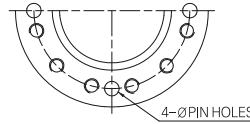
• Pin hole size is same as tap out diameter



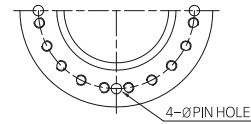
TYPE - A



TYPE - B



TYPE - C



TYPE - D

## Dimension

UNIT : mm

DIM MODEL	TYPE	BASE PART						EXTERNAL PART							INPUT SHAFT PART			HAND WHEEL				
		FLANGE	ØD1	P.C.D		ØD3	H	H1	H2	K	K1	K2	K3	L	L1	L2	ØPD		KEY			
				ØD2	N-H-DP																	
SBWG-BFDC	A	F-07	55	70	4-M8-12	110	2	38.5	132	76	38	38.6	150	104	97	24	16	6X6	200			
SBWG-0DC		F-10	70	102	4-M10-15	135		53.5	159.5	77	38	43.6	177	111.5	104.5				250			
SBWG-00DC		F-12	85	125	4-M12-18	165		65.5	192	86.5	43	53.6	230	122	138				300			
SBWG-01DC		F-14	100	140	4-M16-24	190		78.5	217.5	96	53	65	260	131	147				400			
SBWG-02DC		F-16	130	165	4-M20-30	220		92.5	257	109.5	56	75.5	294	184	166				29	21	6X6	500
SBWG-03DC	B	(F-16) F-20	160	205	8-M16-24	250	3	107.5	287	116	59	87	324	194	176	29	21	6X6	560			
SBWG-35DC		F-25	200	254	8-M16-24	300		122	319.5	126	63	91	329	201	181				560			
SBWG-04DC		F-25	200	254	8-M16-24	300		147	385.5	147	73	120	370	247	207				630			
SBWG-05DC		F-30	230	298	8-M20-30	350		174	437.5	155	78	141	400	257	217				34	32	10X8	710
SBWG-55DC		F-30	230	298	8-M20-30	350		196	484.5	162	80	144	420	277	237				710			
SBWG-06DC		F-35	260	356	8-M30-45	415		222	558.5	200	109	175	489	316	286				44	38	12X8	800
SBWG-07DC		F-40	300	406	8-M36-55	475		272.5	660.5	227	116	209	538	350.5	315				900			
SBWG-75DC	C	F-48	370	483	12-M36-55	560	5	313	776	246	120	220	617	389.5	381	58	50	16X10	1000			
SBWG-08DC		F-48	370	483	12-M36-55	560		366	884	254	125	245	652	424.5	416				1000			
SBWG-09DC	D	F-60	470	603	20-M36-55	700	5	435.5	1023.5	284	138	270	692	465	456	58	50	16X10	1000			
SBWG-10DC		F-60	470	603	20-M36-55	800		498	1191	352	164	330	814	550	614				1000			

# Worm Gear Actuators

## ❖ Feature

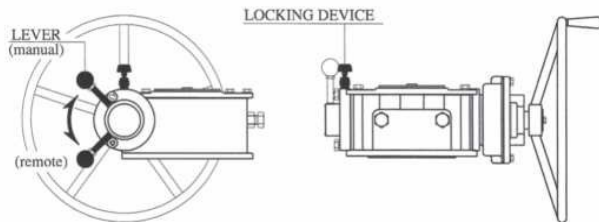
- All mounting bases conform to ISO 5210/1 standards.
- All castings are ductile iron, Class 65-45-12 excellent strength and impact resistance.
- Worm gear material is available in two option.
  - ▶ Ductile iron, Class 80-55-06
  - ▶ Aluminum bronze, B148-C95800
- Worm is 1045 heat treated Carbon steel.
- Removable splined bushing to permit accurate positioning between gear drive and valve stem.
- Options include hand wheels, chain wheels and etc.

## Bushing Type

Splines permit accurate alignment of valve stem key.



## Manual Override Operation



1. Pull up on locking device knob.
2. Rotate lever to "Manual" position.
3. Handwheel can now be operated.  
Note : pneumatic actuator is now fully disengaged.
4. The lever must be placed back in "Remote" position for pneumatic operation.

- Somewhere it should be noted that these units have been specifically developed for use with pneumatic and Hydraulic Actuators providing a positive mechanical means of manual operation.

## CAUTION

- Operate to check the position of manual and remote.
- When convert "manual" position, control the position of worm shaft and then operate to accord with worm gear.

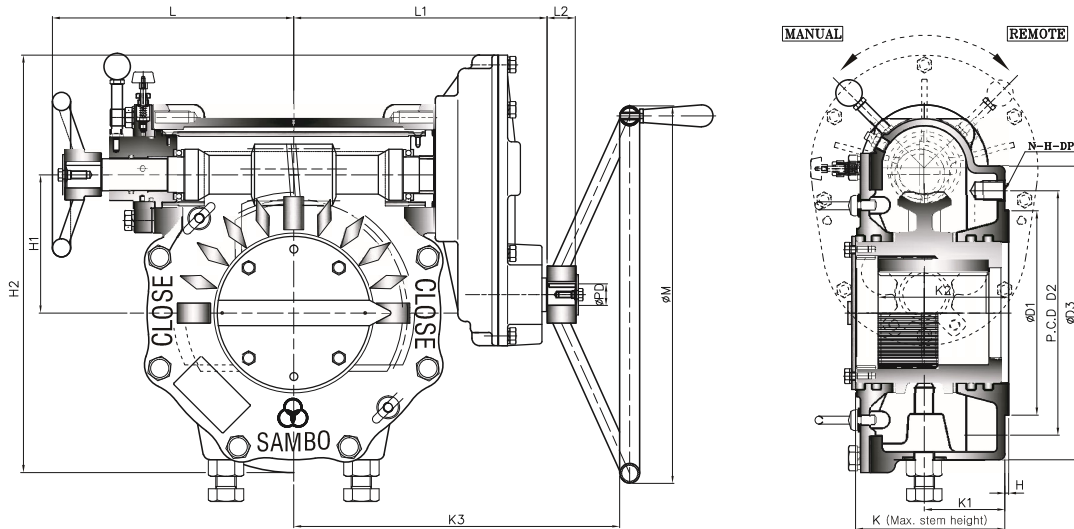
## ❖ Selection Chart for Manual Operation

MODEL \ SIZE	GEAR RATIO	MAX. STEM ACCEPTANCE	MOUNTING OPTION & STANDARD	MAX. TORQUE CAPACITY		WEIGHT
				N-m	Ft. lbf	Kg
SBWG-BFDC	29:1	20 (6X6)	F-07	320	236	4
SBWG-0DC	34:1	28 (8X7)	F-07, F-10	680	502	6
SBWG-00DC	38:1	36 (10X8)	F-10, F-12	980	723	10
SBWG-01DC	43:1	46 (14X9)	F-10, F-12, F-14	1600	1180	13
SBWG-02DC	46:1	60 (18X11)	F-12, F-14, F-16	2500	1844	21
SBWG-03DC	50:1	75 (20X12)	F-14, F-16, (F-20)	3800	2803	29
SBWG-35DC	52:1	80 (22X14)	F-16, (F-20), F-25	5600	4130	43
SBWG-04DC	56:1	95 (25X14)	F-16, (F-20), F-25	9600	7081	56
SBWG-05DC	60:1	115 (32X18)	F-25, F-30	14400	10621	78
SBWG-55DC	62:1	125 (32X18)	F-25, F-30	21150	15599	97
SBWG-06DC	64:1	140 (36X20)	F-25, F-30, F-35	29520	21773	147
SBWG-07DC	68:1	180 (45X25)	F-30, F-35, F-40	45000	33190	243
SBWG-75DC	65:1	210 (50X28)	F-35, F-40, F-48	73350	54100	350
SBWG-08DC	65:1	250 (56X32)	F-40, F-48	108900	80321	473
SBWG-09DC	64:1	280 (63X32)	F-48, F-60	178000	131286	829
SBWG-10DC	62:1	320 (70X36)	F-60	253000	186600	1330

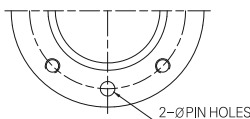
Size and component specification in this catalogue are subject to change without prior notice for quality improvement.

# DECLUTCH GEAR

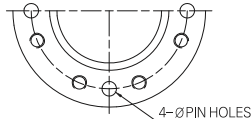
## Horizontal Input with Single Reduction Gear Attachment



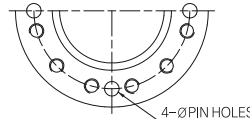
• Pin hole size is same as tap out diameter



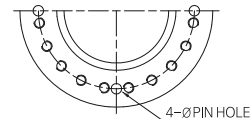
TYPE - A



TYPE - B



TYPE - C



TYPE - D

### Dimension

UNIT : mm

MODEL	DIM	BASE PART						EXTERNAL PART								INPUT SHAFT PART			H A N D W H E E L	
		TYPE	FLANGE	ØD1	P.C.D		ØD3	H	H1	H2	K	K1	K2	K3	L	L1	L2	ØPD		KEY
					ØD2	N-H-DP														
SBWG-00DC-1S	A	F-12	85	125	4-M12-18	165	2	65.5	210	86.5	43	53.6	259	122	166	29	21	6X6	300	
SBWG-01DC-1S		F-14	100	140	4-M16-24	190		78.5	235.5	96	53	65	288	131	175				400	
SBWG-02DC-1S		F-16	130	165	4-M20-30	220		92.5	282	109.5	56	75.5	319	184	190.5				500	
SBWG-03DC-1S	B	(F-16) F-20	160	205	8-M16-24	250	3	107.5	312	116	59	87	349	194	200.5	34	32	10X8	560	
SBWG-35DC-1S		F-25	200	254	8-M16-24	300		122	339.5	126	63	91	367	201	212.5				630	
SBWG-04DC-1S		F-25	200	254	8-M16-24	300		147	417.5	147	73	120	413	247	250				710	
SBWG-05DC-1S		F-30	230	298	8-M20-30	350		174	469.5	155	78	141	443	257	260				800	
SBWG-55DC-1S		F-30	230	298	8-M20-30	350		196	516.5	162	80	144	463	277	280				900	
SBWG-06DC-1S		F-35	260	356	8-M30-45	415		222	621	200	109	175	552	316	349				1000	
SBWG-07DC-1S		F-40	300	406	8-M36-55	475		272.5	723	227	116	209	607	350.5	384				1000	
SBWG-75DC-1S	C	F-48	370	483	12-M36-55	560	5	313	860	246	120	220	721	389.5	485	58	50	16X10	1000	
SBWG-08DC-1S		F-48	370	483	12-M36-55	560		366	968	254	125	245	756	424.5	520					
SBWG-09DC-1S	D	F-60	470	603	20-M36-55	700	5	435.5	1107.5	284	138	270	796	465	560	58	50	16X10	1000	
SBWG-10DC-1S		F-60	470	603	20-M36-55	800		498	1191	352	164	330	927	550	691					

# Worm Gear Actuators

## ❖ Feature

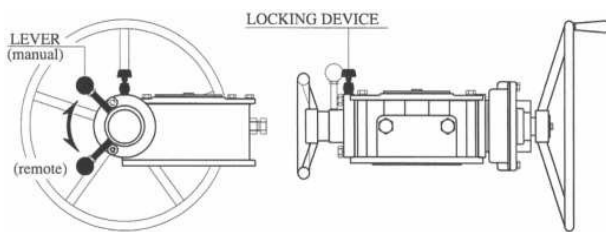
- All mounting bases conform to ISO 5210/1 standards.
- All castings are ductile iron, Class 65-45-12 excellent strength and impact resistance.
- Worm gear material is available in two option.
  - ▶ Ductile iron, Class 80-55-06
  - ▶ Aluminum bronze, B148-C95800
- Worm is 1045 heat treated Carbon steel.
- Removable splined bushing to permit accurate positioning between gear drive and valve stem.
- Options include hand wheels, chain wheels and etc.

## Bushing Type

Splines permit accurate alignment of valve stem key.



## Manual Override Operation



- Somewhere it should be noted that these units have been specifically developed for use with pneumatic and Hydraulic Actuators providing a positive mechanical means of manual operation.

1. Pull up on locking device knob.
2. Rotate lever to "Manual" position.
3. Handwheel can now be operated.  
Note : pneumatic actuator is now fully disengaged.
4. The lever must be placed back in "Remote" position for pneumatic operation.

## CAUTION ❖❖❖

- Operate to check the position of manual and remote.
- When convert "manual" position, control the position of worm shaft and then operate to accord with worm gear.

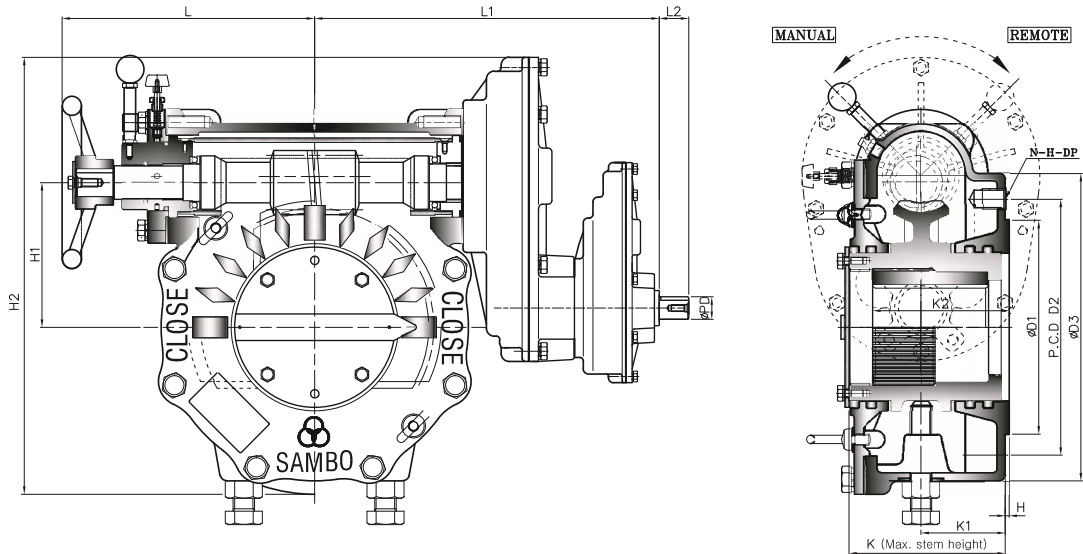
## ❖ Selection Chart for Manual Operation

MODEL \ SIZE	GEAR RATIO	MAX. STEM ACCEPTANCE	MOUNTING OPTION & STANDARD	MAX. TORQUE CAPACITY		WEIGHT
				N-m	Ft. lbf	Kg
SBWG-00DC-1S	67 : 1	36 (10X8)	F-10, F-12	980	723	12
SBWG-01DC-1S	75 : 1	46 (14X9)	F-10, F-12, F-14	1600	1180	15
SBWG-02DC-1S	107 : 1	60 (18X11)	F-12, F-14, F-16	2500	1844	25
SBWG-03DC-1S	117 : 1	75 (20X12)	F-14, F-16, (F-20)	3800	2803	33
SBWG-35DC-1S	118 : 1	80 (22X14)	F-16, (F-20), F-25	5600	4130	50
SBWG-04DC-1S	149.3 : 1	95 (25X14)	F-16, (F-20), F-25	9600	7081	66
SBWG-05DC-1S	160 : 1	115 (32X18)	F-25, F-30	14400	10621	88
SBWG-55DC-1S	165 : 1	125 (32X18)	F-25, F-30	21150	15599	107
SBWG-06DC-1S	232 : 1	140 (36X20)	F-25, F-30, F-35	29520	21773	175
SBWG-07DC-1S	247 : 1	180 (45X25)	F-30, F-35, F-40	45000	33190	271
SBWG-75DC-1S	290 : 1	210 (50X28)	F-35, F-40, F-48	73350	54100	422
SBWG-08DC-1S	290 : 1	250 (56X32)	F-40, F-48	108900	80321	545
SBWG-09DC-1S	286 : 1	280 (63X32)	F-48, F-60	178000	131286	902
SBWG-10DC-1S	266 : 1	320 (70X36)	F-60	253000	186600	1426

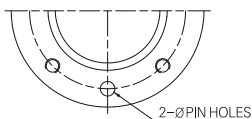
Size and component specification in this catalogue are subject to change without prior notice for quality improvement.

# DECLUTCH GEAR

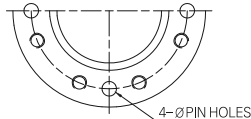
## Horizontal Input with Double Reduction Gear Attachment



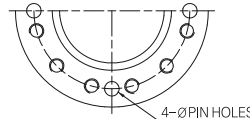
• Pin hole size is same as tap out diameter



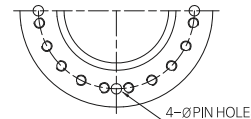
TYPE - A



TYPE - B



TYPE - C



TYPE - D

## Dimension

UNIT : mm

MODEL	DIM	BASE PART						EXTERNAL PART						INPUT SHAFT PART			H A N D W H E E L		
		TYPE	FLANGE	ØD1	P.C.D		ØD3	H	H1	H2	K	K1	K2	L	L1	L2		ØPD	KEY
					ØD2	N-H-DP													
SBWG-00DC-2SD	A	F-12	85	125	4-M12-18	165	2	65.5	210	86.5	43	53.6	122	261	29	21	6X6	300	
SBWG-01DC-2SD		F-14	100	140	4-M16-24	190		78.5	235.5	96	53	65	131	270				400	
SBWG-02DC-2SD		F-16	130	165	4-M20-30	220		92.5	282	109.5	56	75.5	184	282.5				500	
SBWG-03DC-2SD	B	(F-16) F-20	160	205	8-M16-24	250	3	107.5	312	116	59	87	194	292.5	29	21	6X6	560	
SBWG-35DC-2SD		F-25	200	254	8-M16-24	300		122	339.5	126	63	91	201	310.5				560	
SBWG-04DC-2SD		F-25	200	254	8-M16-24	300		147	417.5	147	73	120	247	352.5				630	
SBWG-05DC-2SD		F-30	230	298	8-M20-30	350		174	469.5	155	78	141	257	362.5				710	
SBWG-55DC-2SD		F-30	230	298	8-M20-30	350		196	516.5	162	80	144	277	382.5				710	
SBWG-06DC-2SD		F-35	260	356	8-M30-45	415		222	621	200	109	175	316	497				800	
SBWG-07DC-2SD		F-40	300	406	8-M36-55	475		272.5	723	227	116	209	350.5	515				900	
SBWG-75DC-2SD	C	F-48	370	483	12-M36-55	560	5	313	860	246	120	220	389.5	641	44	38	12X8	1000	
SBWG-08DC-2SD		F-48	370	483	12-M36-55	560		366	968	254	125	245	424.5	676				1000	
SBWG-09DC-2SD	D	F-60	470	603	20-M36-55	700	5	435.5	1107.5	284	138	270	465	716	44	38	12X8	1000	
SBWG-10DC-2SD		F-60	470	603	20-M36-55	800		498	1191	352	164	330	550	860				58	50

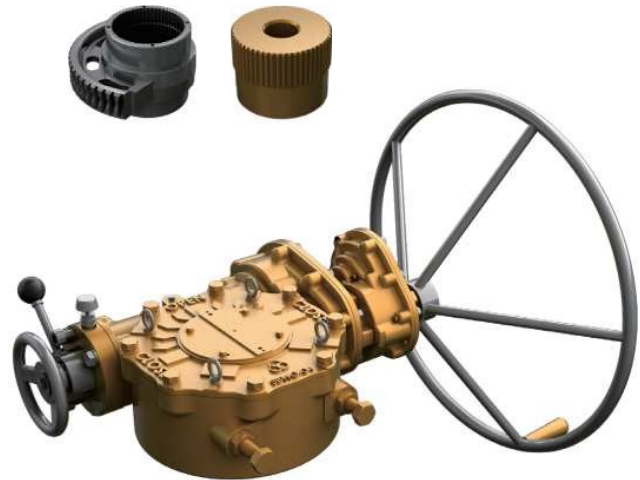
# Worm Gear Actuators

## ❖ Feature

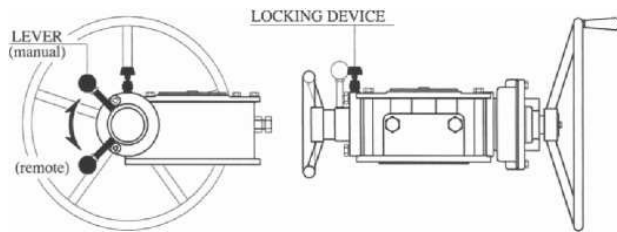
- All mounting bases conform to ISO 5210/1 standards.
- All castings are ductile iron, Class 65-45-12 excellent strength and impact resistance.
- Worm gear material is available in two option.
  - ▶ Ductile iron, Class 80-55-06
  - ▶ Aluminum bronze, B148-C95800
- Worm is 1045 heat treated Carbon steel.
- Removable splined bushing to permit accurate positioning between gear drive and valve stem.
- Options include hand wheels, chain wheels and etc.

## Bushing Type

Splines permit accurate alignment of valve stem key.



## Manual Override Operation



- Somewhere it should be noted that these units have been specifically developed for use with pneumatic and Hydraulic Actuators providing a positive mechanical means of manual operation.

1. Pull up on locking device knob.
2. Rotate lever to "Manual" position.
3. Handwheel can now be operated.  
Note : pneumatic actuator is now fully disengaged.
4. The lever must be placed back in "Remote" position for pneumatic operation.

## CAUTION ❖❖❖

- Operate to check the position of manual and remote.
- When convert "manual" position, control the position of worm shaft and then operate to accord with worm gear.

## ❖ Selection Chart for Manual Operation

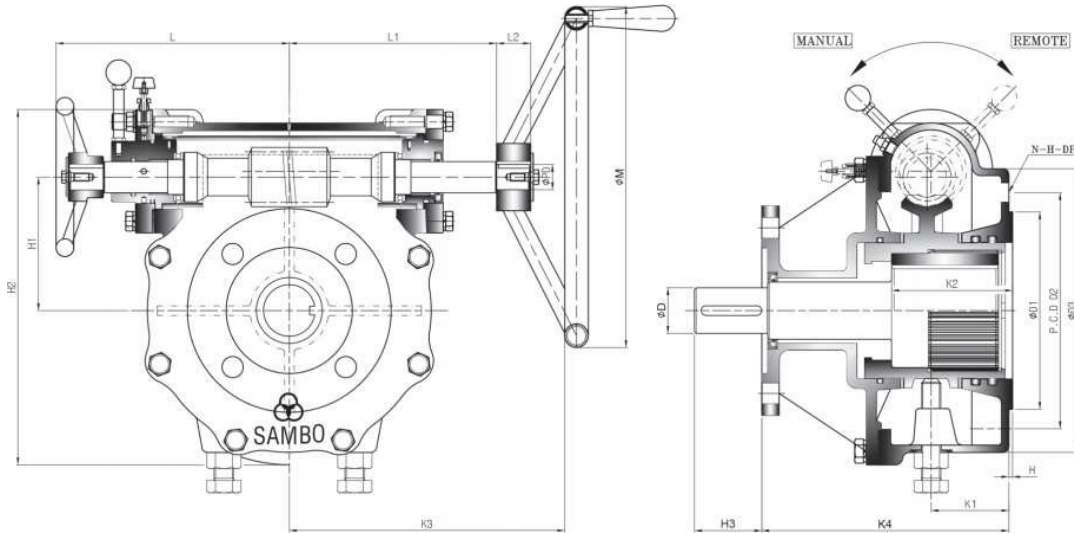
MODEL \ SIZE	MAX. GEAR RATIO (Changeable)	MAX. STEM ACCEPTANCE	MOUNTING OPTION & STANDARD	MAX. TORQUE CAPACITY		WEIGHT
				N-m	Ft. lbf	Kg
SBWG-00DC-2SD	266 : 1	36 (10X8)	F-10, F-12	980	723	14
SBWG-01DC-2SD	298 : 1	46 (14X9)	F-10, F-12, F-14	1600	1180	17
SBWG-02DC-2SD	429 : 1	60 (18X11)	F-12, F-14, F-16	2500	1844	27
SBWG-03DC-2SD	467 : 1	75 (20X12)	F-14, F-16, (F-20)	3800	2803	35
SBWG-35DC-2SD	471 : 1	80 (22X14)	F-16, (F-20), F-25	5600	4130	56
SBWG-04DC-2SD	958 : 1	95 (25X14)	F-16, (F-20), F-25	9600	7081	71
SBWG-05DC-2SD	1026 : 1	115 (32X18)	F-25, F-30	14400	10621	93
SBWG-55DC-2SD	1061 : 1	125 (32X18)	F-25, F-30	21150	15599	112
SBWG-06DC-2SD	2088 : 1	140 (36X20)	F-25, F-30, F-35	29520	21773	188
SBWG-07DC-2SD	2218 : 1	180 (45X25)	F-30, F-35, F-40	45000	33190	284
SBWG-75DC-2SD	4645 : 1	210 (50X28)	F-35, F-40, F-48	73350	54100	450
SBWG-08DC-2SD	4645 : 1	250 (56X32)	F-40, F-48	108900	80321	573
SBWG-09DC-2SD	4574 : 1	280 (63X32)	F-48, F-60	178000	131286	929
SBWG-10DC-2SD	6650 : 1	320 (70X36)	F-60	253000	186600	1464

Size and component specification in this catalogue are subject to change without prior notice for quality improvement.

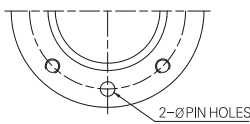


# DECLUTCH GEAR Pneumatic Actuator

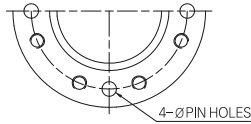
## Horizontal Input



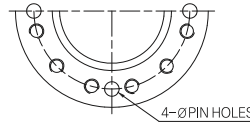
• Pin hole size is same as tap out diameter



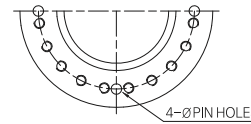
TYPE - A



TYPE - B



TYPE - C



TYPE - D

## Dimension

UNIT : mm

MODEL	DIM	BASE PART						EXTERNAL PART							INPUT SHAFT PART			HAND WHEEL		
		TYPE	FLANGE	ØD1	P.C.D		ØD3	H	H1	H2	K1	K2	K3	K4	L	L1	L2		ØPD	KEY
					ØD2	N-H-DP														
SBWG-BFDCM	A	F-07	55	70	4-M8-12	110	2	38.5	132	38	38.6	150	131	104	97	24	16	6X6	200	
SBWG-0DCM		F-10	70	102	4-M10-15	135		53.5	159.5	38	43.6	177	133	111.5	104.5				250	
SBWG-00DCM		F-12	85	125	4-M12-18	165		65.5	192	43	53.6	230	145.5	122	138				300	
SBWG-01DCM		F-14	100	140	4-M16-24	190		78.5	217.5	53	65	260	170	131	147				400	
SBWG-02DCM		F-16	130	165	4-M20-30	220		92.5	257	56	75.5	294	188.5	184	166				500	
SBWG-03DCM	B	(F-16) F-20	160	205	8-M16-24	250	3	107.5	287	59	87	324	204	194	176	29	21	6X6	560	
SBWG-35DCM		F-25	200	254	8-M16-24	300		122	319.5	63	91	329	216	201	181				630	
SBWG-04DCM		F-25	200	254	8-M16-24	300		147	385.5	73	120	370	242	247	207				710	
SBWG-05DCM		F-30	230	298	8-M20-30	350		174	437.5	78	141	400	247.5	257	217				800	
SBWG-55DCM		F-30	230	298	8-M20-30	350		196	484.5	80	144	420	256	277	237				900	
SBWG-06DCM		F-35	260	356	8-M30-45	415		222	558.5	109	175	489	302	316	286				1000	
SBWG-07DCM		F-40	300	406	8-M36-55	475		272.5	660.5	116	209	538	349	350.5	315				1000	
SBWG-75DCM	C	F-48	370	483	12-M36-55	560	5	313	776	120	220	617	430	389.5	381	58	50	16X10	1000	
SBWG-08DCM								366	884	125	245	652	439	424.5	416					
SBWG-09DCM	D	F-60	470	603	20-M36-55	700	5	435.5	1023.5	138	270	692	467	465	456	58	50	16X10	1000	
SBWG-10DCM								498	1191	352	164	330	562	550	614					

# Worm Gear Actuators

## ❖ Feature

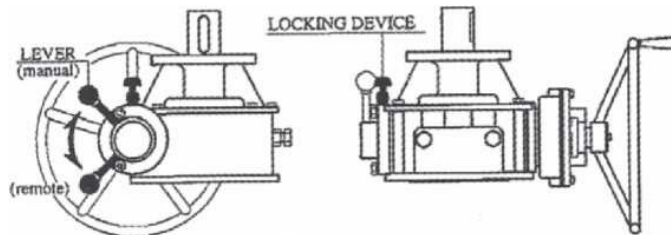
- All mounting bases conform to ISO 5210/1 standards.
- All castings are ductile iron, Class 65-45-12 excellent strength and impact resistance.
- Worm gear material is available in two option.
  - ▶ Ductile iron, Class 80-55-06
  - ▶ Aluminum bronze, B148-C95800
- Worm is 1045 heat treated Carbon steel.
- Removable splined bushing to permit accurate positioning between gear drive and valve stem.
- Options include hand wheels, chain wheels and etc.

## Bushing Type

Splines permit accurate alignment of valve stem key.



## Manual Override Operation



- Somewhere it should be noted that these units have been specifically developed for use with pneumatic and Hydraulic Actuators providing a positive mechanical means of manual operation.

1. Pull up on locking device knob.
2. Rotate lever to "Manual" position.
3. Handwheel can now be operated.  
Note : pneumatic actuator is now fully disengaged.
4. The lever must be placed back in "Remote" position for pneumatic operation.

## CAUTION ❖❖❖

- Operate to check the position of manual and remote.
- When convert "manual" position, control the position of worm shaft and then operate to accord with worm gear.

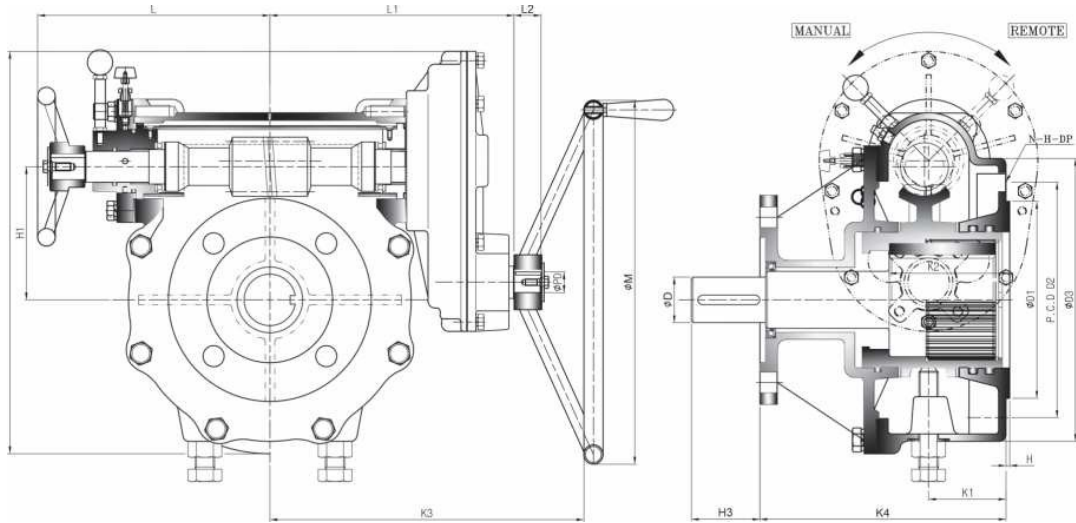
## ❖ Selection Chart for Manual Operation

MODEL	SIZE	GEAR RATIO	MAX. STEM ACCEPTANCE	MOUNTING OPTION & STANDARD	PNEUMATIC PART			MAX. TORQUE CAPACITY		WEIGHT
					ØD	H3	MOUNTING OPTION	N-m	Ft . lbf	
SBWG-BFDCM		29 : 1	20 (6X6)	F-07	Ø20	50	F-07	320	236	5
SBWG-0DCM		34 : 1	28 (8X7)	F-07, F-10	Ø30	50	F-10, F-07	680	502	7
SBWG-00DCM		38 : 1	36 (10X8)	F-10, F-12	Ø40	60	F-12, & F-10	980	723	11
SBWG-01DCM		43 : 1	46 (14X9)	F-10, F-12, F-14	Ø50	75	F-14, F-12, F-10	1600	1180	18
SBWG-02DCM		46 : 1	60 (18X11)	F-12, F-14, F-16	Ø65	80	F-16, F-14, F-12	2500	1844	29
SBWG-03DCM		50 : 1	75 (20X12)	F-14, F-16, (F-20)	Ø70	90	F-16, F-14, F-12	3800	2803	45
SBWG-35DCM		52 : 1	80 (22X14)	F-16, (F-20), F-25	Ø80	90	F-16, F-14	5600	4130	63
SBWG-04DCM		56 : 1	95 (25X14)	F-16, (F-20), F-25	Ø85	90	F-25, F-20, F-16	9600	7081	86
SBWG-05DCM		60 : 1	115 (32X18)	F-25, F-30	Ø100	145	F-30, F-25, F-20	14400	10621	120
SBWG-55DCM		62 : 1	125 (32X18)	F-25, F-30	Ø120	145	F-30, F-25, F-20	21150	15599	169
SBWG-06DCM		64 : 1	140 (36X20)	F-25, F-30, F-35	Ø130	145	F-30, F-25, F-20	29520	21773	250
SBWG-07DCM		68 : 1	180 (45X25)	F-30, F-35, F-40	Ø180	180	F-35, F-30, F-25	45000	33190	365
SBWG-75DCM		65 : 1	210 (50X28)	F-35, F-40, F-48	Ø240	250	F-48, F-40, F-35	73350	54100	558
SBWG-08DCM		65 : 1	250 (56X32)	F-40, F-48	Ø250	280	F-48, F-40, F-35	108900	80321	681
SBWG-09DCM		64 : 1	280 (63X32)	F-48, F-60	Ø260	300	F-60, F-48	178000	131286	1038
SBWG-10DCM		62 : 1	320 (70X36)	F-60	Ø280	320	F-60	253000	186600	1665

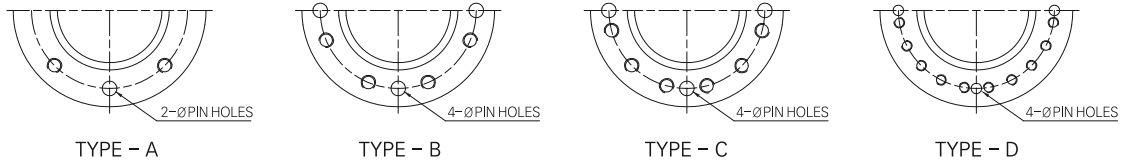
Size and component specification in this catalogue are subject to change without prior notice for quality improvement.

# DECLUTCH GEAR Pneumatic Actuator

## Horizontal Input with Single Reduction Gear Attachment



• Pin hole size is same as tap out diameter



## Dimension

UNIT : mm

MODEL	DIM	BASE PART						EXTERNAL PART								INPUT SHAFT PART			H AND WHEEL			
		TYPE	FLANGE	ØD1	P.C.D		ØD3	H	H1	H2	K1	K2	K3	K4	L	L1	L2	ØPD		KEY		
					ØD2	N-H-DP																
SBWG-00DCM-1S	A	F-12	85	125	4-M12-18	165	2	65.5	210	43	53.6	259	145.5	154	166	29	21	6X6	300			
SBWG-01DCM-1S		F-14	100	140	4-M16-24	190		78.5	235.5	53	65	288	170	163	175				400			
SBWG-02DCM-1S		F-16	130	165	4-M20-30	220		92	282	56	75.5	319	188.5	184	190.5				34	32	10X8	500
SBWG-03DCM-1S	B	(F-16) F-20	160	205	8-M16-24	250	3	107	312	59	87	349	204	194	200.5	34	32	10X8	560			
SBWG-35DCM-1S		F-25	200	254	8-M16-24	300		122	339.5	63	91	367	216	201	212.5				630			
SBWG-04DCM-1S		F-25	200	254	8-M16-24	300		147	417.5	73	120	413	242	247	250				710			
SBWG-05DCM-1S		F-30	230	298	8-M20-30	350		174	469.5	78	141	443	247.5	257	260				800			
SBWG-55DCM-1S		F-35	260	356	8-M30-45	415		196	516.5	80	144	463	256	277	280				900			
SBWG-06DCM-1S		F-40	300	406	8-M36-55	475		222	621	109	175	552	302	316	349				44	38	12X8	900
SBWG-07DCM-1S		F-40	300	406	8-M36-55	475		272.5	723	116	209	607	349	349	384				58	50	16X10	1000
SBWG-75DCM-1S	C	F-48	370	483	12-M36-55	560	5	313	860	120	220	721	430	389.5	485	58	50	16X10	1000			
SBWG-08DCM-1S								366	968	125	245	756	439	424.5	520							
SBWG-09DCM-1S	D	F-60	470	603	20-M36-55	700	5	435.5	1107.5	138	270	796	467	465	560	58	50	16X10	1000			
SBWG-10DCM-1S						800		498	1191	164	330	927	560	550	691							

# Worm Gear Actuators

## Feature

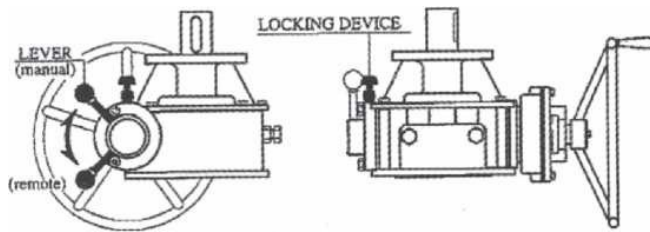
- All mounting bases conform to ISO 5210/1 standards.
- All castings are ductile iron, Class 65-45-12 excellent strength and impact resistance.
- Worm gear material is available in two option.
  - ▶ Ductile iron, Class 80-55-06
  - ▶ Aluminum bronze, B148-C95800
- Worm is 1045 heat treated Carbon steel.
- Removable splined bushing to permit accurate positioning between gear drive and valve stem.
- Options include hand wheels, chain wheels and etc.

## Bushing Type

Splines permit accurate alignment of valve stem key.



## Manual Override Operation



- Somewhere it should be noted that these units have been specifically developed for use with pneumatic and Hydraulic Actuators providing a positive mechanical means of manual operation.

1. Pull up on locking device knob.
2. Rotate lever to "Manual" position.
3. Handwheel can now be operated.

Note : pneumatic actuator is now fully disengaged.

4. The lever must be placed back in "Remote" position for pneumatic operation.

## CAUTION

- Operate to check the position of manual and remote.
- When convert "manual" position, control the position of worm shaft and then operate to accord with worm gear.

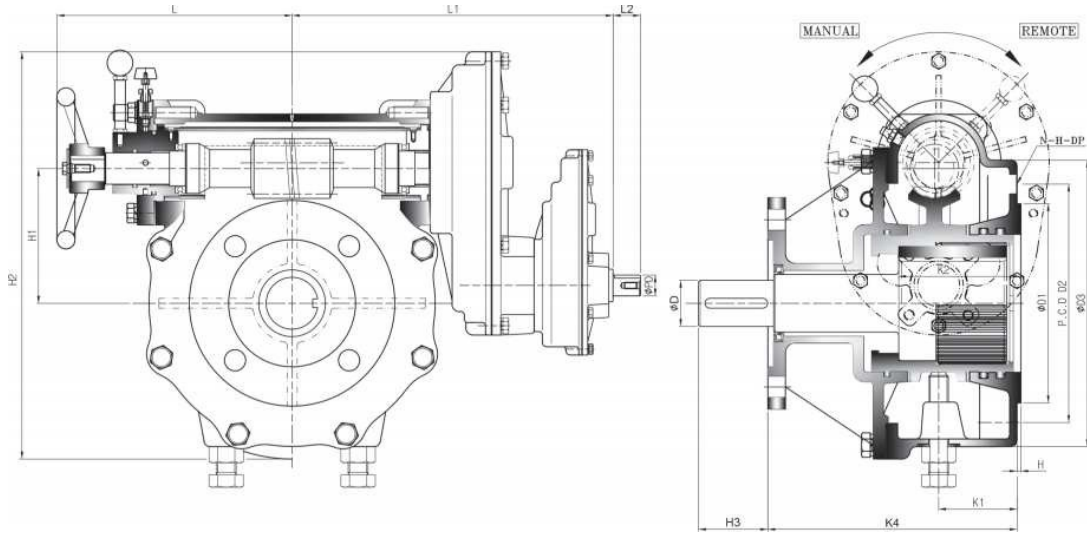
## Selection Chart for Manual Operation

MODEL	SIZE	GEAR RATIO	MAX. STEM ACCEPTANCE	MOUNTING OPTION & STANDARD	PNEUMATIC PART			MAX. TORQUE CAPACITY		WEIGHT
					ØD	H3	MOUNTING OPTION	N-m	Ft . lbf	Kg
SBWG-00DCM-1S		67 : 1	36 (10X8)	F-10, F-12	Ø40	60	F-12, F-10	980	723	13
SBWG-01DCM-1S		75 : 1	46 (14X9)	F-10, F-12, F-14	Ø50	75	F-14, F-12, F-10	1600	1180	21
SBWG-02DCM-1S		107 : 1	60 (18X11)	F-12, F-14, F-16	Ø65	80	F-16, F-14, F-12	2500	1844	32
SBWG-03DCM-1S		117 : 1	75 (20X12)	F-14, F-16, (F-20)	Ø70	90	F-16, F-14, F-12	3800	2803	47
SBWG-35DCM-1S		118 : 1	80 (22X14)	F-16, (F-20), F-25	Ø80	90	F-16, F-14	5600	4130	66
SBWG-04DCM-1S		149.3 : 1	95 (25X14)	F-16, (F-20), F-25	Ø85	90	F-25, F-20, F-16	9600	7081	95
SBWG-05DCM-1S		160 : 1	115 (32X18)	F-25, F-30	Ø100	145	F-30, F-25, F-20	14400	10621	124
SBWG-55DCM-1S		165 : 1	125 (32X18)	F-25, F-30	Ø120	145	F-30, F-25, F-20	21150	15599	173
SBWG-06DCM-1S		232 : 1	140 (36X20)	F-25, F-30, F-35	Ø130	145	F-30, F-25, F-20	29520	21773	260
SBWG-07DCM-1S		247 : 1	180 (45X25)	F-30, F-35, F-40	Ø180	180	F-35, F-30, F-25	45000	33190	375
SBWG-75DCM-1S		290 : 1	210 (50X28)	F-35, F-40, F-48	Ø240	250	F-48, F-40, F-35	73350	54100	586
SBWG-08DCM-1S		290 : 1	250 (56X32)	F-40, F-48	Ø250	280	F-48, F-40, F-35	108900	80321	709
SBWG-09DCM-1S		286 : 1	280 (63X32)	F-48, F-60	Ø260	300	F-60, F-48	178000	131286	1110
SBWG-10DCM-1S		266 : 1	320 (70X36)	F-60	Ø280	320	F-60	253000	186600	1782

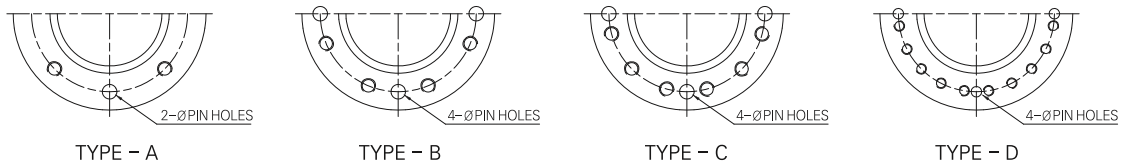
Size and component specification in this catalogue are subject to change without prior notice for quality improvement.

# DECLUTCH GEAR Pneumatic Actuator

## Horizontal Input with Single Reduction Gear Attachment



• Pin hole size is same as tap out diameter



## Dimension

UNIT : mm

MODEL	DIM	BASE PART						EXTERNAL PART							INPUT SHAFT PART			H A N D W H E E L	
		TYPE	FLANGE	ØD1	P.C.D		ØD3	H	H1	H2	K1	K2	K4	L	L1	L2	ØPD		KEY
					ØD2	N-H-DP													
SBWG-00DCM-2SD	A	F-12	85	125	4-M12-18	165	2	65.5	210	43	53.6	145.5	154	261	29	21	6X6	300	
SBWG-01DCM-2SD		F-14	100	140	4-M16-24	190		78.5	235.5	53	65	170	163	270				400	
SBWG-02DCM-2SD		F-16	130	165	4-M20-30	220		92	282	56	75.5	188.5	184	282.5				500	
SBWG-03DCM-2SD	B	(F-16) F-20	160	205	8-M16-24	250	3	107	312	59	87	204	194	292.5	29	21	6X6	560	
SBWG-35DCM-2SD		F-25	200	254	8-M16-24	300		122	339.5	63	91	216	201	310.5				630	
SBWG-04DCM-2SD		F-25	200	254	8-M16-24	300		147	417.5	73	120	242	247	352.5				710	
SBWG-05DCM-2SD		F-30	230	298	8-M20-30	350		174	469.5	78	141	247.5	257	362.5				800	
SBWG-55DCM-2SD		F-35	260	356	8-M30-45	415		196	516.5	80	144	256	277	382.5				900	
SBWG-06DCM-2SD		F-40	300	406	8-M36-55	475		222	621	109	175	302	316	497				1000	
SBWG-07DCM-2SD		F-40	300	406	8-M36-55	475		272.5	723	116	209	349	349	515				900	
SBWG-75DCM-2SD	C	F-48	370	483	12-M36-55	560	5	313	860	120	220	430	389.5	641	44	38	12X8	1000	
SBWG-08DCM-2SD		F-48	370	483	12-M36-55	560		366	968	125	245	439	424.5	676				1000	
SBWG-09DCM-2SD	D	F-60	470	603	20-M36-55	700	5	435.5	1107.5	138	270	467	465	716	58	50	16X10	1000	
SBWG-10DCM-2SD		F-60	470	603	20-M36-55	800		498	1191	164	330	560	550	860				1000	



# Worm Gear Actuators

## Feature

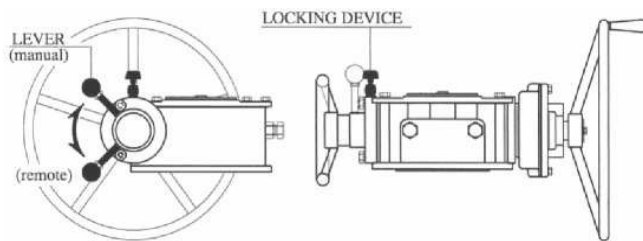
- All mounting bases conform to ISO 5210/1 standards.
- All castings are ductile iron, Class 65-45-12 excellent strength and impact resistance.
- Worm gear material is available in two option.
  - ▶ Ductile iron, Class 80-55-06
  - ▶ Aluminum bronze, B148-C95800
- Worm is 1045 heat treated Carbon steel.
- Removable splined bushing to permit accurate positioning between gear drive and valve stem.
- Options include hand wheels, chain wheels and etc.

## Bushing Type

Splines permit accurate alignment of valve stem key.



## Manual Override Operation



- Somewhere it should be noted that these units have been specifically developed for use with pneumatic and Hydraulic Actuators providing a positive mechanical means of manual operation.

1. Pull up on locking device knob.
2. Rotate lever to "Manual" position.
3. Handwheel can now be operated.

Note : pneumatic actuator is now fully disengaged.

4. The lever must be placed back in "Remote" position for pneumatic operation.

## CAUTION

- Operate to check the position of manual and remote.
- When convert "manual" position, control the position of worm shaft and then operate to accord with worm gear.

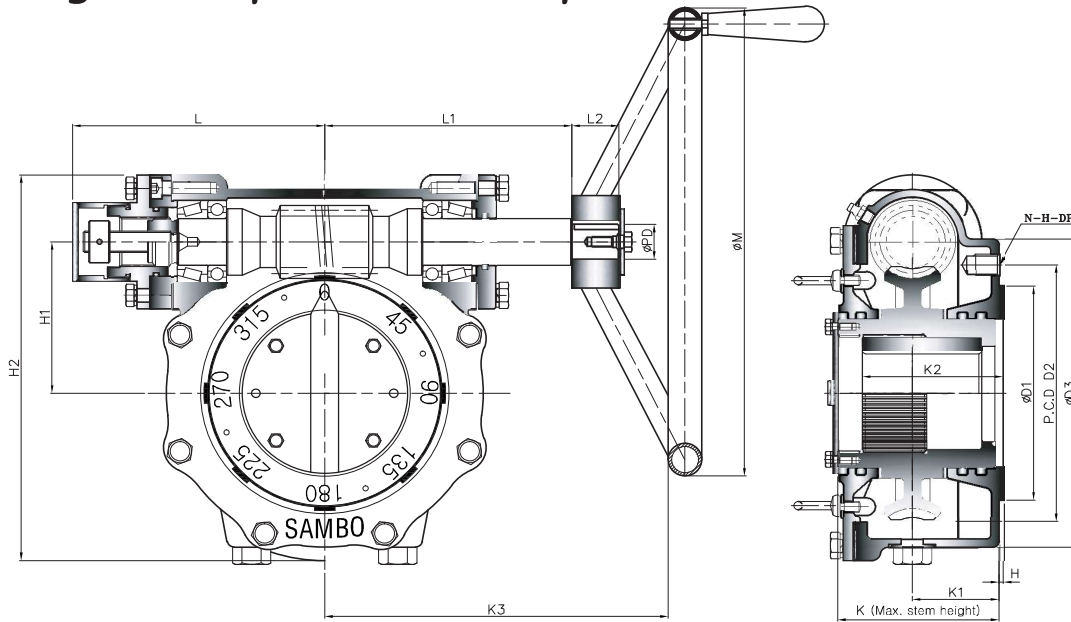
## Selection Chart for Manual Operation

MODEL	SIZE	MAX. GEAR RATIO (Changeable)	MAX. STEM ACCEPTANCE	MOUNTING OPTION & STANDARD	PNEUMATIC PART			MAX. TORQUE CAPACITY		WEIGHT
					ØD	H3	MOUNTING OPTION	N-m	Ft . lbf	
SBWG-00DCM-2SD		266 : 1	36 (10X8)	F-10 , F-12	Ø40	60	F-12, F-10	980	723	16
SBWG-01DCM-2SD		298 : 1	46 (14X9)	F-10 , F-12 , F-14	Ø50	75	F-14, F-12, F-10	1600	1180	24
SBWG-02DCM-2SD		449 : 1	60 (18X11)	F-12 , F-14 , F-16	Ø65	80	F-16, F-14, F-12	2500	1844	36
SBWG-03DCM-2SD		467 : 1	75 (20X12)	F-14 , F-16 , (F-20)	Ø70	90	F-16, F-14, F-12	3800	2803	51
SBWG-35DCM-2SD		471 : 1	80 (22X14)	F-16 , (F-20) , F-25	Ø80	90	F-16, F-14	5600	4130	70
SBWG-04DCM-2SD		958 : 1	95 (25X14)	F-16 , (F-20) , F-25	Ø85	90	F-25, F-20, F-16	9600	7081	101
SBWG-05DCM-2SD		1026 : 1	115 (32X18)	F-25 , F-30	Ø100	145	F-30, F-25, F-20	14400	10621	130
SBWG-55DCM-2SD		1061 : 1	125 (32X18)	F-25 , F-30	Ø120	145	F-30, F-25, F-20	21150	15599	179
SBWG-06DCM-2SD		2088 : 1	140 (36X20)	F-25 , F-30 , F-35	Ø130	145	F-30, F-25, F-20	29520	21773	275
SBWG-07DCM-2SD		2218 : 1	180 (45X25)	F-30 , F-35 , F-40	Ø180	180	F-35, F-30, F-25	45000	33190	390
SBWG-75DCM-2SD		4645 : 1	210 (50X28)	F-35 , F-40 , F-48	Ø240	250	F-48, F-40, F-35	73350	54100	627
SBWG-08DCM-2SD		4645 : 1	250 (56X32)	F-40 , F-48	Ø250	280	F-48, F-40, F-35	108900	80321	750
SBWG-09DCM-2SD		4574 : 1	280 (63X32)	F-48 , F-60	Ø260	300	F-60, F-48	178000	131286	1152
SBWG-10DCM-2SD		6650 : 1	320 (70X36)	F-60	Ø280	320	F-60	253000	186600	1830

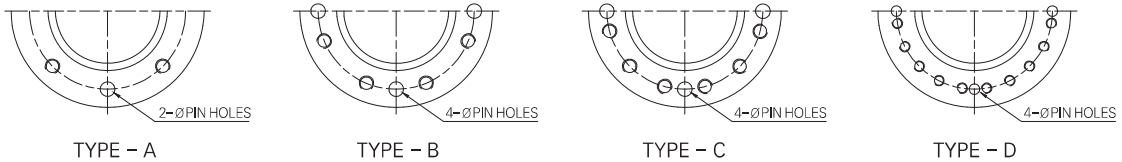
Size and component specification in this catalogue are subject to change without prior notice for quality improvement.

# PART TURN 45° 90° 135° 180° 225° 270° 315° 360°

## Traveling Nut Stop : Horizontal Input



• Pin hole size is same as tap out diameter



### Dimension

UNIT : mm

MODEL	DIM	BASE PART						EXTERNAL PART							INPUT SHAFT PART			H AND WHEEL		
		TYPE	FLANGE	ØD1	P.C.D		ØD3	H	H1	H2	K	K1	K2	K3	L	L1	L2		ØPD	KEY
					ØD2	N-H-DP														
SBWG-BFTN	A	F-07	55	70	4-M8-12	110	2	42	132	76	38	38.6	150	145	97	24	16	6X6	200	
SBWG-0TN		F-10	70	102	4-M10-15	135		57	159.5	77	38	43.6	177	152.5	104.5				250	
SBWG-00TN		F-12	85	125	4-M12-18	165		69.5	192	86.5	43	53.6	230	181	138				300	
SBWG-01TN		F-14	100	140	4-M16-24	190		82.5	217.5	96	53	65	260	190	147				400	
SBWG-02TN		F-16	130	165	4-M20-30	220		97	257	109.5	56	75.5	294	228	166				500	
SBWG-03TN	B	(F-16) F-20	160	205	8-M16-24	250	3	112	287	116	59	87	324	238	176	34	26	8X7	560	
SBWG-35TN		F-25	200	254	8-M16-24	300		127	319.5	126	63	91	329	243	181				630	
SBWG-04TN		F-25	200	254	8-M16-24	300		153	385.5	147	73	120	370	352	207				710	
SBWG-05TN		F-30	230	298	8-M20-30	350		180	437.5	155	78	141	400	362	217				800	
SBWG-55TN			350	202	484.5	162		80	144	420	382	237	900							
SBWG-06TN		F-35	260	356	8-M30-45	415		230	558.5	200	109	175	489	497	286				800	
SBWG-07TN		F-40	300	406	8-M36-55	475		280.5	660.5	227	116	209	538	532	315				900	
SBWG-75TN		C	F-48	370	483	12-M36-55		560	326	776	246	120	220	617	621				381	58
SBWG-08TN	560						379	884	254	125	245	652	656	416						
SBWG-09TN	D	F-60	470	603	20-M36-55	700	448.5	1023.5	284	138	270	692	696	456	58	50	16X10	1000		
SBWG-10TN						800	513	1191	352	164	330	814	845	614						
SBWG-11TN						900	513	1399.5	400	181	370	857	886.5	657						
SBWG-12TN						1000	711	1621	484	265	455	980	1056	702						
SBWG-13TN						1000	809	1814	546	301	515	988	1096	752						

# Worm Gear Actuators

## Feature

- All mounting bases conform to ISO 5210/1 standards.
- All castings are ductile iron, Class 65-45-12 excellent strength and impact resistance.
- Worm gear material is available in two option.
  - ▶ Ductile iron, Class 80-55-06
  - ▶ Aluminum bronze, B148-C95800
- Worm is 1045 heat treated Carbon steel.
- Removable splined bushing to permit accurate positioning between gear drive and valve stem.
- Options include hand wheels, chain wheels and etc.

## Bushing Type

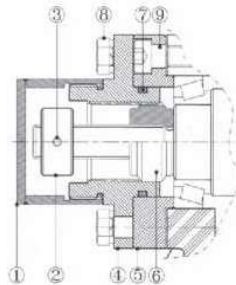
Splines permit accurate alignment of valve stem key.



## Traveling Nut Stop

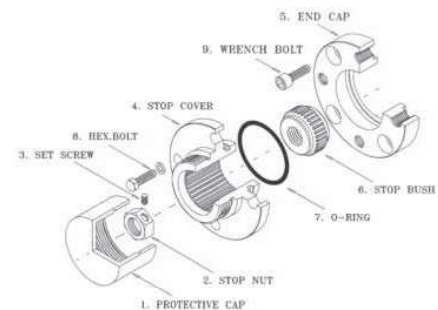
• If worm gear actuators are supplied on a valve, the end stops are already set.

• In case end stops need to be adjusted set end position OPEN first, if the exact end position of the valve can not be seen through a position marking at the valve shaft, the setting may have to be done with the valve removed.



## [SETTING]

- Remove all bolts⑧ at stop cover.④
  - Turn valve manually to end position OPEN.
  - In case stop cover.④ do not correspond to the threads of the housing.
- Take off the stop covers.④ and place it in the required position.
- Fit bolts⑥ with washers and fasten them evenly.
  - Finally, protective cap① remove, turn stop nut② to adjust end position CLOSE.



## Selection Chart for Manual Operation

MODEL	SIZE	GEAR RATIO	MAX. STEM ACCEPTANCE	MOUNTING OPTION & STANDARD	MAX. TORQUE CAPACITY		WEIGHT
					N-m	Ft. lbf	Kg
SBWG-BFTN		32 : 1	20 (6X6)	F-07	360	266	6
SBWG-0TN		36 : 1	28 (8X7)	F-07, F-10	780	575	9
SBWG-00TN		40 : 1	36 (10X8)	F-10, F-12	1200	885	13
SBWG-01TN		44 : 1	46 (14X9)	F-10, F-12, F-14	2000	1475	16
SBWG-02TN		48 : 1	60 (18X11)	F-12, F-14, F-16	2800	2065	25
SBWG-03TN		52 : 1	75 (20X12)	F-14, F-16, (F-20)	4300	3172	34
SBWG-35TN		52 : 1	80 (22X14)	F-16, (F-20), F-25	6100	4499	39
SBWG-04TN		56 : 1	95 (25X14)	F-16, (F-20), F-25	10400	7671	63
SBWG-05TN		60 : 1	115 (32X18)	F-25, F-30	15900	11727	85
SBWG-55TN		62 : 1	125 (32X18)	F-25, F-30	23500	17333	105
SBWG-06TN		64 : 1	140 (36X20)	F-25, F-30, F-35	32800	24192	155
SBWG-07TN		68 : 1	180 (45X25)	F-30, F-35, F-40	51100	37689	254
SBWG-75TN		66 : 1	210 (50X28)	F-35, F-40, F-48	81500	60111	364
SBWG-08TN		66 : 1	250 (56X32)	F-40, F-48	121000	89245	489
SBWG-09TN		66 : 1	280 (63X32)	F-48, F-60	192500	141981	848
SBWG-10TN		64 : 1	320 (70X36)	F-60	275000	202830	1352
SBWG-11TN		68 : 1	360 (80X40)	F-60	442000	326002	2113
SBWG-12TN		70 : 1	400 (90X45)	F-60, (F-80)	610000	449913	2931
SBWG-13TN		72 : 1	440 (100X50)	F-60, (F-80)	970000	715435	3835

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# Worm Gear Actuators Technical Data



Model	Ratio	Max. Output Torque		Mechanical Advantage (±10%)	Max. Input Torque (N·m)	Turns to Close (REV)	Bore Diameter (Stem. Max)	Mounting Flange (ISO5210/1)		
		(N·m)	(Ft·lbf)							
SBWG-BF	32 :1	360	266	11.6	30.9	8	20 (6x6)	F-07		
SBWG-BFTN						32				
SBWG-BFMT						32				
SBWG-BFDC	29 :1	320	236	10.9	29.4	8	20 (6x6)	F-07		
SBWG-BFDCM						8				
SBWG-0	36:1	780	575	13.4	58.1	9	28 (8x7)	F-10 F-07 (OPTION)		
SBWG-0TN						9				
SBWG-0MT						9				
SBWG-0DC	34 :1	680	502	13.3	51.1	8.5	28 (8x7)	F-10 F-07 (OPTION)		
SBWG-0DCM						8.5				
SBWG-00	40 :1	1200	885	14.1	85.0	10	36 (10x8)	F-12 F-10 (OPTION)		
SBWG-00TN						10				
SBWG-00MT						40				
SBWG-00-1S	80 :1	1200	885	26.0	46.2	20	36 (10x8)	F-12 F-10 (OPTION)		
SBWG-00TN-1S						20				
SBWG-00MT-1S						80				
SBWG-00-1ST	P-40:1	1200	885	14.1	85.0	10	36 (10x8)	F-12 F-10 (OPTION)		
	S-80:1			26.0	46.2	20				
SBWG-00-1SD				47.8	25.1	40				
SBWG-00TN-1SD	160 :1	1200	885	47.8	25.1	40	36 (10x8)	F-12 F-10 (OPTION)		
SBWG-00MT-1SD				26.0	46.2	20				
SBWG-00-1SDT	P-80:1			47.8	25.1	40				
	S-160:1	87.9	13.7	80						
SBWG-00-2SD	320 :1	1200	885	87.9	13.7	80	36 (10x8)	F-12 F-10 (OPTION)		
SBWG-00-1S2B	160 :1			49.3	24.3	40				
SBWG-00-1SD2B	320 :1			90.8	13.2	80				
SBWG-00-2B	80 :1	1200	885	26.8	44.8	20	36 (10x8)	F-12 F-10 (OPTION)		
SBWG-00-2BD	160 :1			50.9	23.6	40				
SBWG-00-3W	1440 :1			189.3	6.3	360				
SBWG-00-3W2B	1440 :1	1200	885	176.1	6.8	360	36 (10x8)	F-12 F-10 (OPTION)		
SBWG-00DC	38 :1			980	723	14.1			69.3	9.5
SBWG-00DCM						14.1			69.3	9.5
SBWG-00DC-1S	67 :1	980	723	22.8	43.1	16.6	36 (10x8)	F-12 F-10 (OPTION)		
SBWG-00DCM-1S				22.8	43.1	16.6				
SBWG-00DC-2SD	266 :1	980	723	77.0	12.7	66.5	36 (10x8)	F-12 F-10 (OPTION)		
SBWG-00DCM-2SD				77.0	12.7	66.5				
Remark	• Ratio & Base specification to be changeable.									
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# Worm Gear Actuators Technical Data



Model	Ratio	Max. Output Torque		Mechanical Advantage (±10%)	Max. Input Torque (N·m)	Turns to Close (REV)	Bore Diameter (Stem. Max)	Mounting Flange (ISO5210/1)
		(N·m)	(Ft·lbf)					
SBWG-01	44 :1	2000	1475	15.1	132.2	11	46 (14x9)	F-14 F-12, F-10 (OPTION)
SBWG-01TN						44		
SBWG-01MT						22		
SBWG-01-1S	88 :1			27.8	71.8	88		
SBWG-01TN-1S				22				
SBWG-01MT-1S	11							
SBWG-01-1ST	P-44:1			15.1	132.2	11		
	S-88:1			27.8	71.8	22		
SBWG-01-1SD	176 :1			51.2	39.0	44		
SBWG-01TN-1SD				176				
SBWG-01MT-1SD		22						
SBWG-01-1SDT	P-88:1	27.8	71.8	22				
	S-176:1	51.2	39.0	44				
SBWG-01-2SD	352 :1	94.3	21.2	88				
SBWG-01-1S2B	176 :1	52.9	37.8	44				
SBWG-01-1SD2B	352 :1	97.3	20.5	88				
SBWG-01-2B	88 :1	28.8	69.6	22				
SBWG-01-2BD	176 :1	54.6	36.6	44				
SBWG-01-3W	1584 :1	203.0	9.9	396				
SBWG-01-3W2B	1584 :1	188.8	10.6	396				
SBWG-01DC	43 :1	1600	1180	15.0	106.8	10.8	60 (18x11)	F-16 F-14, F-12 (OPTION)
SBWG-01DCM								
SBWG-01DC-1S	75 :1			26.1	61.2	18.8		
SBWG-01DCM-1S								
SBWG-01DC-2SD	298:1			87.9	18.2	74.5		
SBWG-01DCM-2SD								
SBWG-02	48 :1	2800	2065	15.9	176.1	12	60 (18x11)	F-16 F-14, F-12 (OPTION)
SBWG-02TN						48		
SBWG-02MT						30.4		
SBWG-02-1S	121.6 :1			37.1	75.6	121.6		
SBWG-02TN-1S				12				
SBWG-02TM-1S	30.4							
SBWG-02-1ST	P-48:1			15.9	176.1	12		
	S-121.6:1			37.1	75.6	30.4		
SBWG-02-1SD	308.1 :1			86.4	32.4	77		
SBWG-02TN-1SD				308.1				
SBWG-02MT-1SD		30.4						
SBWG-02-1SDT	P-121.6:1	37.1	75.6	30.4				
	S-308.1:1	86.4	32.4	77				
SBWG-02-2SD	616.1 :1	158.9	17.6	154				
SBWG-02-1S2B	243.2 :1	70.4	39.8	60.8				
SBWG-02-1SD2B	616.1 :1	164.1	17.1	154				
SBWG-02-2B	120 :1	37.8	74.1	30				
SBWG-02-2BD	240 :1	71.7	39.0	60				
SBWG-02-3W	1920 :1	224.4	12.5	480				
SBWG-02-3W2B	1920 :1	208.7	13.4	480				
SBWG-02DC	46 :1	2500	1844	15.9	157.4	11.5	60 (18x11)	F-16 F-14, F-12 (OPTION)
SBWG-02DCM								
SBWG-02DC-1S	107 :1			34.0	73.5	26.8		
SBWG-02DCM-1S								
SBWG-02DC-2SD	429 :1			115.4	21.7	107.3		
SBWG-02DCM-2SD								
Remark	<ul style="list-style-type: none"> <li>• Ratio &amp; Base specification to be changeable.</li> <li>• Max Output Torque includes safety factor.</li> <li>• If any request requirement, please contact us any time.</li> </ul>							

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# Worm Gear Actuators Technical Data



Model	Ratio	Max. Output Torque		Mechanical Advantage (±10%)	Max. Input Torque (N·m)	Turns to Close (REV)	Bore Diameter (Stem. Max)	Mounting Flange (ISO5210/1)				
		(N·m)	(Ft·lbf)									
SBWG-03	52 :1	4300	3172	16.9	253.7	13	75 (20x12)	(F-20) F-16, F-14 (OPTION)				
SBWG-03TN						52						
SBWG-03MT	131.7 :1			39.5	108.9	32.9						
SBWG-03-1S				131.7								
SBWG-03TN-1S	P-52:1			16.9	253.7	13						
SBWG-03MT-1S				S-131.7:1	39.5	108.9			32.9			
SBWG-03-1ST	333.7 :1			92.1	46.7	83.4						
SBWG-03-1SD				333.7								
SBWG-03TN-1SD	P-131.7:1			39.5	108.9	32.9						
SBWG-03MT-1SD				S-333.7:1	92.1	46.7			83.4			
SBWG-03-1SDT	667.4 :1			169.4	25.4	166.9						
SBWG-03-2SD				667.4								
SBWG-03-1S2B	263.5 :1			75.0	57.3	65.9						
SBWG-03-1SD2B				174.9								
SBWG-03-2B	130 :1			40.2	106.8	32.5						
SBWG-03-2BD				76.5								
SBWG-03-3W	2080 :1			233.1	18.4	520						
SBWG-03-3W2B				216.8								
SBWG-03DC	50 :1			3800	2803	16.9			224.6	12.5	80 (22x14)	F-25, (F-20) F-16 (OPTION)
SBWG-03DCM						117 :1			36.4	104.3		
SBWG-03DC-1S	467 :1	123.0	30.9				116.8					
SBWG-03DCM-1S		117										
SBWG-03DC-2SD	6100	4499	17.4			350.5	13					
SBWG-03DCM-2SD							52					
SBWG-35	52 :1	6100	4499	17.4	350.5	13	80 (22x14)	F-25, (F-20) F-16 (OPTION)				
SBWG-35TN						52						
SBWG-35MT	131.7 :1			40.6	150.4	32.9						
SBWG-35-1S				131.7								
SBWG-35TN-1S	P-52:1			17.4	350.5	13						
SBWG-35MT-1S				S-131.7:1	40.6	150.4			32.9			
SBWG-35-1ST	333.7 :1			94.5	64.5	83.4						
SBWG-35-1SD				333.7								
SBWG-35TN-1SD	P-131.7:1			40.6	150.4	32.9						
SBWG-35MT-1SD				S-333.7:1	94.5	64.5			83.4			
SBWG-35-1SDT	667.4 :1			173.9	35.1	166.9						
SBWG-35-2SD				667.4								
SBWG-35-1S2B	263.5 :1			77.1	79.2	65.9						
SBWG-35-1SD2B				179.6								
SBWG-35-2B	130 :1			41.3	147.6	32.5						
SBWG-35-2BD				78.5								
SBWG-35-3W	2288 :1			263.3	23.2	572						
SBWG-35-3W2B				244.9								
SBWG-35DC	52 :1			5600	4130	20.1			278.6	13	80 (22x14)	F-25, (F-20) F-16 (OPTION)
SBWG-35DCM						118 :1			41.9	133.6		
SBWG-35DC-1S	471 :1	141.9	39.5				117.9					
SBWG-35DCM-1S		118										
SBWG-35DC-2SD	SBWG-35DCM-2SD	471										
SBWG-35DCM-2SD		471										
Remark	<ul style="list-style-type: none"> <li>Ratio &amp; Base specification to be changeable.</li> <li>Max Output Torque includes safety factor.</li> <li>If any request requirement, please contact us any time.</li> </ul>											

# Worm Gear Actuators Technical Data



Model	Ratio	Max. Output Torque		Mechanical Advantage (±10%)	Max. Input Torque (N·m)	Turns to Close (REV)	Bore Diameter (Stem. Max)	Mounting Flange (ISO5210/1)			
		(N·m)	(Ft·lbf)								
SBWG-04	56 :1	10400	7671	18.3	569.8	14	95 (25x14)	F-25 (F-20), F-16 (OPTION)			
SBWG-04TN						56					
SBWG-04MT						42					
SBWG-04-1S	168 :1			50.4	206.5	168					
SBWG-04TN-1S						42					
SBWG-04MT-1S	P-56:1 S-168:1			18.3	569.8	14					
SBWG-04-1ST						42					
SBWG-04-1SD	504 :1			139.0	74.8	126					
SBWG-04TN-1SD						504					
SBWG-04MT-1SD						42					
SBWG-04-1SDT	P-168:1 S-504:1	50.4	206.5	42							
SBWG-04-2SD				126							
SBWG-04-2SD	1276.8 :1	324.0	32.1	319.2							
SBWG-04-1S2B	420 :1	119.6	86.9	105							
SBWG-04-1SD2B	1260 :1	330.2	31.5	315							
SBWG-04-2B	168 :1	52.0	199.9	42							
SBWG-04-2BD	420 :1	123.5	84.2	105							
SBWG-04-3W	2688 :1	290.2	35.8	672							
SBWG-04-3W2B	3360 :1	337.3	30.8	840							
SBWG-04DC	56 :1	9600	7081	21.2	452.7	14	115 (32x18)	F-30 F-25 (OPTION)			
SBWG-04DCM						149.3 :1			52.0	184.5	37.3
SBWG-04DC-1S											239.5
SBWG-04DCM-1S	958 :1			282.5	34.0	239.5					
SBWG-04DC-2SD						239.5					
SBWG-04DCM-2SD	239.5										
SBWG-05	60:1	15900	11727	19.6	813.1	15	115 (32x18)	F-30 F-25 (OPTION)			
SBWG-05TN						60					
SBWG-05MT						45					
SBWG-05-1S	180:1			54.0	294.6	180					
SBWG-05TN-1S						45					
SBWG-05MT-1S	P-60:1 S-180:1			19.6	813.1	15					
SBWG-05-1ST						45					
SBWG-05-1SD	540 :1			149.0	106.7	135					
SBWG-05TN-1SD						540					
SBWG-05MT-1SD						45					
SBWG-05-1SDT	P-180:1 S-540:1	54.0	294.6	45							
SBWG-05-2SD				135							
SBWG-05-2SD	1368:1	347.2	45.8	342							
SBWG-05-1S2B	450:1	128.2	124.0	112.5							
SBWG-05-1SD2B	1350:1	353.8	44.9	337.5							
SBWG-05-2B	180:1	55.7	285.3	45							
SBWG-05-2BD	450:1	132.4	120.1	112.5							
SBWG-05-3W	2880:1	305.9	52.0	720							
SBWG-05-3W2B	3600:1	355.6	44.7	900							
SBWG-05DC	60:1	14400	10621	22.4	644.0	15	115 (32x18)	F-30 F-25 (OPTION)			
SBWG-05DCM						160:1			54.9	262.5	40
SBWG-05DC-1S											256.6
SBWG-05DCM-1S	1026:1			297.9	48.3	256.6					
SBWG-05DC-2SD						256.6					
SBWG-05DCM-2SD	256.6										
Remark	<ul style="list-style-type: none"> <li>Ratio &amp; Base specification to be changeable.</li> <li>Max Output Torque includes safety factor.</li> <li>If any request requirement, please contact us any time.</li> </ul>										

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# Worm Gear Actuators Technical Data



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		(N·m)	(Ft·lbf)										
SBWG-55	62:1	23500	17333	20.8	1129.8	15.5	125 (32x18)	F-30 F-25 (OPTION)					
SBWG-55TN						62							
SBWG-55MT						62							
SBWG-55-1S	186:1	23500	17333	57.4	409.3	46.5	125 (32x18)	F-30 F-25 (OPTION)					
SBWG-55TN-1S						186							
SBWG-55MT-1S						186							
SBWG-55-1ST	P-62:1	23500	17333	20.8	1129.8	15.5	125 (32x18)	F-30 F-25 (OPTION)					
	S-186:1					57.4			409.3	46.5			
SBWG-55-1SD	558:1					23500			17333	158.5	148.3	139.5	125 (32x18)
SBWG-55TN-1SD		558											
SBWG-55MT-1SD		558											
SBWG-55-1SDT	P-186:1	23500	17333	57.4	409.3	46.5	125 (32x18)	F-30 F-25 (OPTION)					
	S-558:1					158.5			148.3	139.5			
SBWG-55-2SD	1413.6:1					369.3			63.6	353.4			
SBWG-55-1S2B	465:1	23500	17333	136.3	172.4	116.3	125 (32x18)	F-30 F-25 (OPTION)					
SBWG-55-1SD2B	1395:1			376.3	62.4	348.8							
SBWG-55-2B	186:1			59.3	396.4	46.5							
SBWG-55-2BD	465:1	23500	17333	140.8	166.9	116.3	125 (32x18)	F-30 F-25 (OPTION)					
SBWG-55-3W	3224:1			352.5	66.7	806							
SBWG-55-3W2B	4030:1			409.8	57.3	1007.5							
SBWG-55DC	62:1	21150	15599	23.6	897.5	15.5	125 (32x18)	F-30 F-25 (OPTION)					
SBWG-55DCM						165:1			21150	15599	57.8	365.8	41.3
SBWG-55DC-1S													
SBWG-55DC-2SD	1061:1	21150	15599	313.9	67.4	265.2	125 (32x18)	F-30 F-25 (OPTION)					
SBWG-55DCM-2SD									SBWG-55DCM-2SD				
SBWG-06	64:1	32800	24192	20.2	1627.5	16	140 (36x20)	F-35 F-30, F-25 (OPTION)					
SBWG-06TN						64							
SBWG-06MT						64							
SBWG-06-1S	256:1	32800	24192	74.2	442.2	64	140 (36x20)	F-35 F-30, F-25 (OPTION)					
SBWG-06TN-1S						256							
SBWG-06MT-1S						256							
SBWG-06-1ST	P-64:1	32800	24192	20.2	1627.5	16	140 (36x20)	F-35 F-30, F-25 (OPTION)					
	S-256:1					74.2			442.2	64			
SBWG-06-1SD	1024:1					32800			24192	272.9	120.2	256	140 (36x20)
SBWG-06TN-1SD		1024											
SBWG-06MT-1SD		1024											
SBWG-06-1SDT	P-256:1	32800	24192	74.2	442.2	64	140 (36x20)	F-35 F-30, F-25 (OPTION)					
	S-1024:1					272.9			120.2	256			
SBWG-06-2SD	3072:1					753.3			43.5	768			
SBWG-06-1S2B	768:1	32800	24192	211.4	155.2	192	140 (36x20)	F-35 F-30, F-25 (OPTION)					
SBWG-06-1SD2B	3072:1			777.9	42.2	768							
SBWG-06-2B	256:1			76.6	428.3	64							
SBWG-06-2BD	768:1	32800	24192	218.3	150.3	192	140 (36x20)	F-35 F-30, F-25 (OPTION)					
SBWG-06-3W	3328:1			350.7	93.5	832							
SBWG-06-3W2B	4160:1			407.7	80.4	1040							
SBWG-06DC	64:1	29520	21773	23.3	1267.2	16	140 (36x20)	F-35 F-30, F-25 (OPTION)					
SBWG-06DCM						232:1			29520	21773	77.7	380.0	58
SBWG-06DC-1S													
SBWG-06DC-2SD	2088:1	29520	21773	591.8	49.9	522	140 (36x20)	F-35 F-30, F-25 (OPTION)					
SBWG-06DCM-2SD									SBWG-06DCM-2SD				
Remark	<ul style="list-style-type: none"> <li>Ratio &amp; Base specification to be changeable.</li> <li>Max Output Torque includes safety factor.</li> <li>If any request requirement, please contact us any time.</li> </ul>												

# Worm Gear Actuators Technical Data



Model	Ratio	Max. Output Torque		Mechanical Advantage (±10%)	Max. Input Torque (N·m)	Turns to Close (REV)	Bore Diameter (Stem. Max)	Mounting Flange (ISO5210/1)
		(N·m)	(Ft·lbf)					
SBWG-07	68:1	51100	37689	22.0	2323.0	17	180 (45x25)	F-40 F-35, F-30 (OPTION)
SBWG-07TN						68		
SBWG-07MT						68		
SBWG-07-1S	272:1			80.9	631.3	68		
SBWG-07TN-1S				272				
SBWG-07MT-1S				17				
SBWG-07-1ST	P-68:1			22.0	2323.0	68		
	S-272:1			80.9	631.3	17		
SBWG-07-1SD	1088:1			297.9	171.5	272		
SBWG-07TN-1SD				1088				
SBWG-07MT-1SD				68				
SBWG-07-1SDT	P-272:1			80.9	631.3	272		
	S-1088:1	297.9	171.5	68				
SBWG-07-2SD	3264:1	822.2	62.2	816				
SBWG-07-1S2B	816:1	230.7	221.5	204				
SBWG-07-1SD2B	3264:1	849.0	60.2	816				
SBWG-07-2B	272:1	83.6	611.3	68				
SBWG-07-2BD	816:1	238.2	214.5	204				
SBWG-07-3W	3536:1	382.8	133.5	884				
SBWG-07-3W2B	4420:1	445.0	114.8	1105				
SBWG-07DC	68:1	45000	33190	25.0	1802.9	17	210 (50x28)	F-48 F-40, F-35 (OPTION)
SBWG-07DCM						61.6		
SBWG-07DC-1S						61.6		
SBWG-07DCM-1S	247:1			83.2	540.6	61.6		
SBWG-07DC-2SD	2218:1			633.9	71.0	554.5		
SBWG-07DCM-2SD				16.5				
SBWG-75	66:1	81500	60111	23.1	3532.3	16.5	210 (50x28)	F-48 F-40, F-35 (OPTION)
SBWG-75TN						66		
SBWG-75MT						66		
SBWG-75-1S	330:1			106.1	767.9	82.5		
SBWG-75TN-1S				330				
SBWG-75MT-1S				16.5				
SBWG-75-1ST	P-66:1			23.1	3532.3	82.5		
	S-330:1			106.1	767.9	16.5		
SBWG-75-1SD	1650:1			488.2	166.9	412.5		
SBWG-75TN-1SD				1650				
SBWG-75MT-1SD				82.5				
SBWG-75-1SDT	P-330:1			106.1	767.9	412.5		
	S-1650:1	488.2	166.9	82.5				
SBWG-75-2SD	6600:1	1796.7	45.4	1650				
SBWG-75-1S2B	1320:1	403.3	202.1	330				
SBWG-75-1SD2B	6600:1	1855.3	43.9	1650				
SBWG-75-2B	330:1	109.6	743.6	82.5				
SBWG-75-2BD	1072.5:1	338.4	240.9	268.1				
SBWG-75-3W	3696:1	421.1	193.5	924				
SBWG-75-3W2B	5544:1	587.4	138.7	1386				
SBWG-75DC	65:1	73350	54100	25.7	2856.0	16.3	210 (50x28)	F-48 F-40, F-35 (OPTION)
SBWG-75DCM						72.6		
SBWG-75DC-1S						72.6		
SBWG-75DCM-1S	290:1			105.5	695.0	72.6		
SBWG-75DC-2SD	4645:1			1429.3	51.3	1161.3		
SBWG-75DCM-2SD				1161.3				
Remark	<ul style="list-style-type: none"> <li>Ratio &amp; Base specification to be changeable.</li> <li>Max Output Torque includes safety factor.</li> <li>If any request requirement, please contact us any time.</li> </ul>							

# Worm Gear Actuators Technical Data



Model	Ratio	Max. Output Torque		Mechanical Advantage (±10%)	Max. Input Torque (N·m)	Turns to Close (REV)	Bore Diameter (Stem. Max)	Mounting Flange (ISO5210/1)							
		(N·m)	(Ft·lbf)												
SBWG-08	66:1	121000	89245	24.3	4978.0	16.5	250 (56x32)	F-48 F-40 (OPTION)							
SBWG-08TN						66									
SBWG-08MT						82.5									
SBWG-08-1S	330:1			111.8	1082.2	330									
SBWG-08TN-1S				24.3	4978.0	16.5									
SBWG-08MT-1S				111.8	1082.2	82.5									
SBWG-08-1ST	P-66:1			121000	89245	24.3			4978.0	16.5	250 (56x32)	F-48 F-40 (OPTION)			
SBWG-08-1SD	S-330:1									111.8			1082.2	82.5	
	SBWG-08-1SDT									1650:1			514.3	235.3	412.5
P-330:1						111.8			1082.2	82.5					
S-1650:1						514.3			235.3	412.5					
SBWG-08-2SD	6600:1					1892.8			63.9	1650			250 (56x32)	F-48 F-40 (OPTION)	
SBWG-08-1S2B	1320:1	424.9	284.8			330									
SBWG-08-1SD2B	6600:1	1954.5	61.9			1650									
SBWG-08-2B	363:1	127.0	952.7			90.8									
SBWG-08-2BD	1270.5:1	422.3	286.5			317.6									
SBWG-08-3W	3960:1	475.3	254.6			990									
SBWG-08-3W2B	5940:1	663.1	182.5			1485									
SBWG-08DC	65:1	108900		26.4	4120.7	16.3	280 (63x32)	F-60 F-48 (OPTION)							
SBWG-08DCM															
SBWG-08DC-1S									290:1	108.6	1002.8	72.6			
SBWG-08DCM-1S										4645:1	1470.7	74.0			1161.3
SBWG-08DC-2SD															
SBWG-08DCM-2SD															
SBWG-09	66:1			192500	141981	25.9			7429.6	16.5	280 (63x32)	F-60 F-48 (OPTION)			
SBWG-09TN										66					
SBWG-09MT										82.5					
SBWG-09-1S	330:1					119.2			1615.1	330					
SBWG-09TN-1S						25.9			7429.6	16.5					
SBWG-09MT-1S						119.2			1615.1	82.5					
SBWG-09-1ST	P-66:1	192500	141981			25.9	7429.6	16.5	280 (63x32)	F-60 F-48 (OPTION)					
SBWG-09-1SD	S-330:1												119.2	1615.1	82.5
	1650:1												548.3	351.1	412.5
SBWG-09-1SDT	P-330:1					119.2	1615.1	82.5							
SBWG-09-1SDT	S-1650:1					548.3	351.1	412.5							
	6600:1					2017.6	95.4	1650							
SBWG-09-2SD	1320:1			452.9	425.0	330									
SBWG-09-1S2B	6600:1			2083.4	92.4	1650									
SBWG-09-2B	396:1			147.7	1303.4	99									
SBWG-09-2BD	1584:1			561.2	343.0	396									
SBWG-09-3W	4092:1			538.9	357.2	1023									
SBWG-09-3W2B	6138:1			751.8	256.0	1534.5									
SBWG-09DC	64:1	178000	131286	27.0	6604.5	16	280 (63x32)	F-60 F-48 (OPTION)							
SBWG-09DCM															
SBWG-09DC-1S									286:1	110.8	1607.2	71.5			
SBWG-09DCM-1S										4574:1	1499.9	118.7	1143.5		
SBWG-09DC-2SD															
SBWG-09DCM-2SD															
Remark	<ul style="list-style-type: none"> <li>Ratio &amp; Base specification to be changeable.</li> <li>Max Output Torque includes safety factor.</li> <li>If any request requirement, please contact us any time.</li> </ul>														



# Worm Gear Actuators Technical Data



Model	Ratio	Max. Output Torque		Mechanical Advantage (±10%)	Max. Input Torque (N·m)	Turns to Close (REV)	Bore Diameter (Stem. Max)	Mounting Flange (ISO5210/1)				
		(N·m)	(Ft·lbf)									
SBWG-10	64:1	275000	202830	24.3	11313.4	16	320 (70x36)	F-60				
SBWG-10TN						64						
SBWG-10MT						80						
SBWG-10-1S	320:1			111.8	2459.4	320						
SBWG-10TN-1S				80								
SBWG-10MT-1S				16								
SBWG-10-1ST	P-64:1			24.3	11313.4	16						
	S-320:1			111.8	2459.4	80						
SBWG-10-1SD	1600:1			514.3	534.7	400						
SBWG-10TN-1SD				1600								
SBWG-10MT-1SD				80								
SBWG-10-1SDT	P-320:1			111.8	2459.4	400						
	S-1600:1			514.3	534.7	1600						
SBWG-10-2SD	8000:1			2366.0	116.2	2000						
SBWG-10-1S2B	1600:1			531.1	517.8	400						
SBWG-10-1SD2B	8000:1			2443.1	112.6	2000						
SBWG-10-2B	416:1			150.1	1832.1	104						
SBWG-10-2BD	2080:1			713.0	385.7	520						
SBWG-10-3W	4096:1	489.9	561.3	1024								
SBWG-10-3W2B	8192:1	911.2	301.8	2048								
SBWG-10DC	62:1	253000	186600	25.1	10075.7	15.5	360 (80x40)	F-60				
SBWG-10DCM						66.5						
SBWG-10DC-1S						66.5						
SBWG-10DCM-1S						1662.5						
SBWG-10DC-2SD						1662.5						
SBWG-10DCM-2SD						1662.5						
SBWG-11	68:1	442000	326002	26.2	16882.0	17	360 (80x40)	F-60				
SBWG-11TN						68						
SBWG-11MT						85						
SBWG-11-1S	340:1			120.4	3670.0	340						
SBWG-11TN-1S				85								
SBWG-11MT-1S				17								
SBWG-11-1ST	P-68:1			26.2	16882.0	17						
	S-340:1			120.4	3670.0	85						
SBWG-11-1SD	1700:1			554.0	797.8	425						
SBWG-11TN-1SD				1700								
SBWG-11MT-1SD				85								
SBWG-11-1SDT	P-340:1			120.4	3670.0	425						
	S-1700:1			554.0	797.8	1700						
SBWG-11-2SD	8500:1			2548.4	173.4	2125						
SBWG-11-1S2B	1700:1			572.1	772.6	425						
SBWG-11-1SD2B	8500:1			2631.5	168.0	2125						
SBWG-11-2B	442:1			161.7	2733.9	110.5						
SBWG-11-2BD	2210:1			767.9	575.6	552.5						
SBWG-11-3W	4624:1			575.9	767.5	1156						
SBWG-11-3W2B	9248:1			1071.2	412.6	2312						
Remark	● Ratio & Base specification to be changeable.											
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Size and component specification in this catalogue are subject to change without prior notice for quality improvement.

# Worm Gear Actuators Technical Data



Model	Ratio	Max. Output Torque		Mechanical Advantage (±10%)	Max. Input Torque (N·m)	Turns to Close (REV)	Bore Diameter (Stem. Max)	Mounting Flange (ISO5210/1)
		(N·m)	(Ft·lbf)					
SBWG-12	70 :1	610000	449913	27.1	22546.0	17.5	400 (90x45)	F-80 F-60 (OPTION)
SBWG-12TN						70		
SBWG-12MT						70		
SBWG-12-1S	350 :1			124.5	4901.3	87.5		
SBWG-12TN-1S				124.5	4901.3	350		
SBWG-12MT-1S				124.5	4901.3	350		
SBWG-12-1ST	P-70:1			27.1	22546.0	17.5		
	S-350:1			124.5	4901.3	87.5		
SBWG-12-1SD	1750 :1			572.5	1065.5	437.5		
SBWG-12TN-1SD				572.5	1065.5	1750		
SBWG-12MT-1SD				572.5	1065.5	1750		
SBWG-12-1SDT	P-350:1			124.5	4901.3	87.5		
	S-1750:1			572.5	1065.5	437.5		
SBWG-12-2SD	8750 :1			2633.5	231.6	2187.5		
SBWG-12-1S2B	1925 :1			650.3	938.0	481.3		
SBWG-12-1SD2B	9625 :1	2991.3	203.9	2406.3				
SBWG-12-2B	490 :1	179.9	3390.4	122.5				
SBWG-12-2BD	2695 :1	940.1	648.9	673.8				
SBWG-12-3W	4620 :1	624.3	977.2	1155				
SBWG-12-3W2B	11550 :1	1451.4	420.3	2887.5				
SBWG-13	72 :1	970000	715435	28.0	34640.7	18	450 (100x50)	F-80 F-60 (OPTION)
SBWG-13TN						72		
SBWG-13MT						72		
SBWG-13-1S	360 :1			128.8	7530.6	90		
SBWG-13TN-1S				128.8	7530.6	360		
SBWG-13MT-1S				128.8	7530.6	360		
SBWG-13-1ST	P-72:1			28.0	34640.7	18		
	S-360:1			128.8	7530.6	90		
SBWG-13-1SD	1800 :1			592.5	1637.1	450		
SBWG-13TN-1SD				592.5	1637.1	1800		
SBWG-13MT-1SD				592.5	1637.1	1800		
SBWG-13-1SDT	P-360:1			128.8	7530.6	90		
	S-1800:1			592.5	1637.1	450		
SBWG-13-2SD	9000 :1			2725.6	355.9	2250		
SBWG-13-1S2B	2160 :1			734.2	1321.2	540		
SBWG-13-1SD2B	10800 :1			3377.3	287.2	2700		
SBWG-13-2B	544 :1			201.0	4826.1	136		
SBWG-13-2BD	3264 :1			1145.6	846.7	816		
SBWG-13-3W	4752 :1			680.6	1425.1	1188		
SBWG-13-3W2B	13068 :1			1740.7	557.2	3267		
Remark	● Ratio & Base specification to be changeable.							
	● Max Output Torque includes safety factor.							
	● If any request requirement, please contact us any time.							