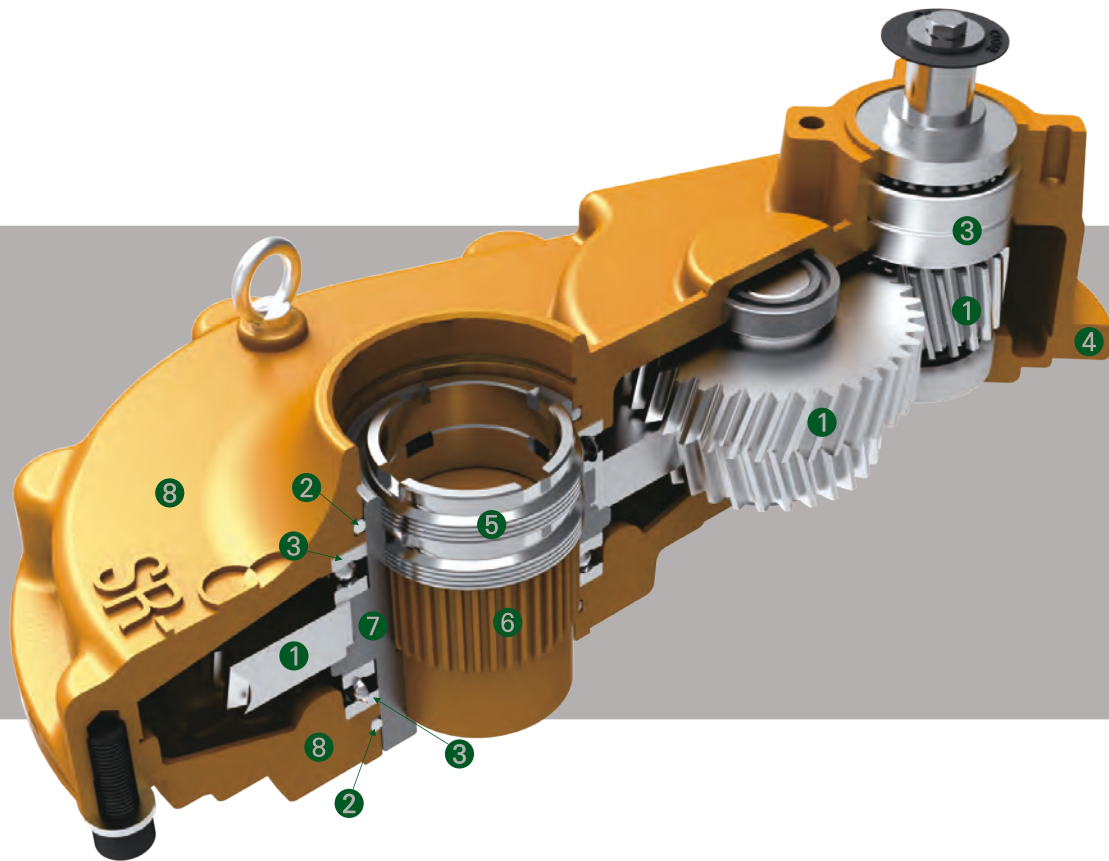


# Spur Gear Actuators



Spur Gear

**① Helical gear, Idle gear, Helical Pinion**

All the gears are 1045 heat treated steel.  
All the gears are precision cut.

**② O-ring**

Units are completely O-ring, suitable for temporary submergence to meet IP67 Class.

**③ Thrust ball & Deep groove ball Bearing**

They have excellent load bearing capacity.

**④ Gaskets**

The base & housing is sealed by a Non-asbestor Gasket to prevent any leakage and is waterproof.

**⑤ Dual Locking Nuts**

This design incorporates dual locking nuts which provide a jam effect for positive locking.  
No set screw or pinning is required.

Global Leader  
**SAMBO** SPIRAL BEVEL GEAR ACTUATORS

The World's  
Highest Quality!

### Grease ZENITH EPSB 2 >>>

Each unit has a Alumite Grease type fitting and a grease plug to adding lubricant.

This series of Spur Gears range up to 32,000N.m(23,602ft-lbf)

Torque and Thrust capacities up to 4,100kN(921,700lbf)

Stem capacities are up to 160mm(6.3inch)

A high Load design, type SB-SRH is also available ranging up to 58,000N.m(42,778ft-lbf).

Thrust capacities up to 5,200kN(1,169,000lbf) stem capacities are up to 160mm(6.3inch).

Spur Gear

#### ⑥ Stem Nut

A unique top Entry Replaceable stem Nut.

After long years of service can be easily replaced without removing Gear from valve.

Material is high tensile brass providing both corrosion and abrasion resistance.

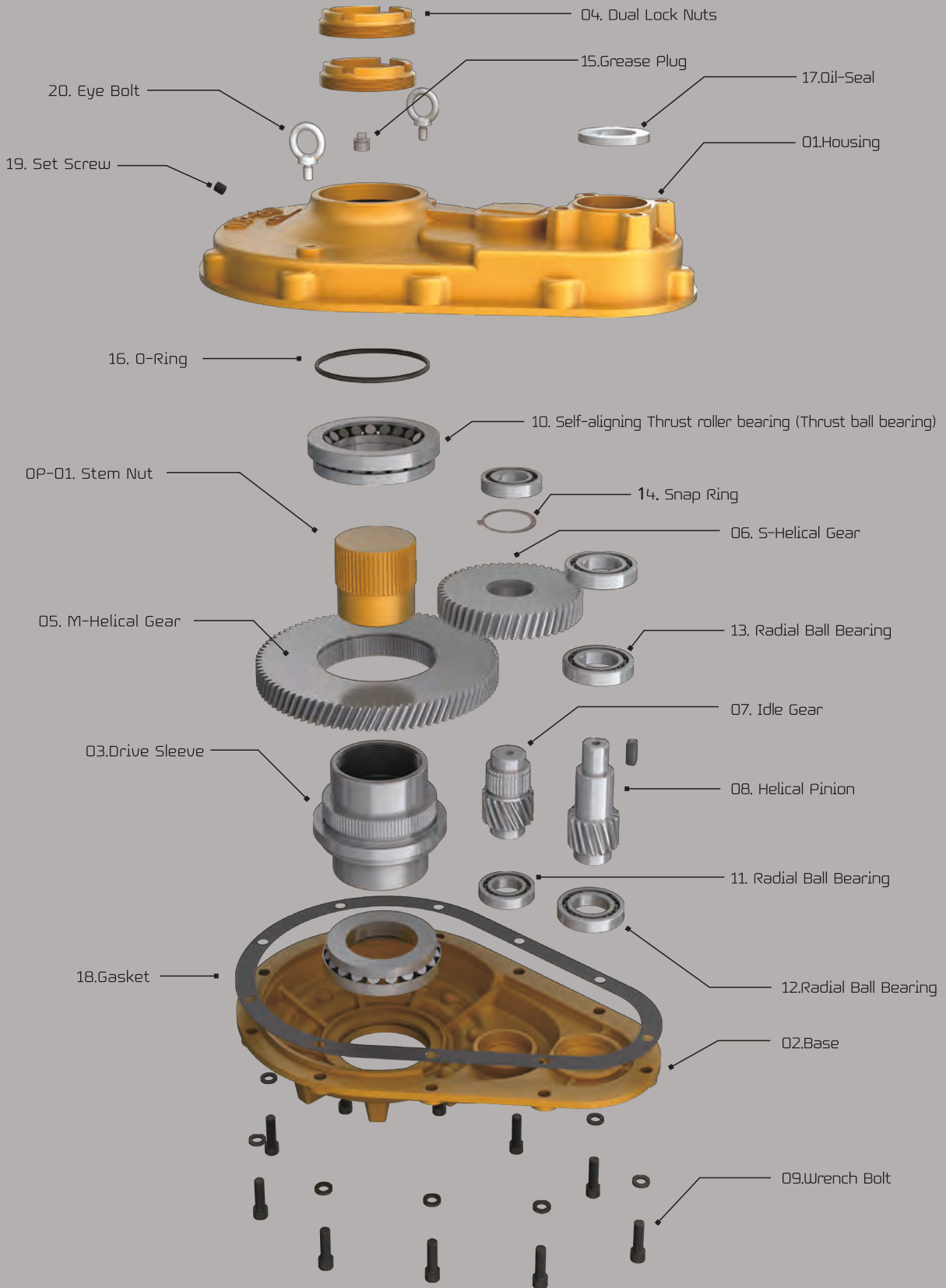
#### ⑦ Drive Sleeve

Also Ductile Iron, Class 65-45-12. supports both axial and radial loads.

#### ⑧ Housing and Base

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

This provides high strength and excellent impact resistance.



Size and component specification in this catalogue are subject to change without prior notice for quality improvement.  
 \* Mark has been changed and updated.

## Part List & Material >>>

	NO	DESCRIPTION	MATERIAL			REMARK
			NAME	JIS	ASTM	
STANDARD	1	Housing	Ductile Iron	FCD-450	A536-65-45-12	
	2	Base	Ductile Iron	FCD-450	A536-65-45-12	
	3	Drive Sleeve	Ductile Iron	FCD-450	A536-65-45-12	
	4	Dual Lock Nuts	Carbon Steel	S45C	A576-1045	
	5	M-Helical Gear	Carbon Steel	S45C	A576-1045	
	6	S-Helical Gear	Carbon Steel	S45C	A576-1045	
	7	Idle Gear	Carbon Steel	S45C	A576-1045	
	8	Helical Pinion	Carbon Steel	S45C	A576-1045	
	9	Wrench Bolt (S/W)	Alloy Steel	SCM435	A322-4135	
	10	Thrust Bearing	Special Steel	SUJ2	A295-52100	
	11	Radial Ball Bearing	Special Steel	SUJ2	A295-52100	
	12	Radial Ball Bearing	Special Steel	SUJ2	A295-52100	
	13	Radial Ball Bearing	Special Steel	SUJ2	A295-52100	
	14	Snap Ring	Steel			
	15	Grease Plug	Steel + Galvanizing			
	16	O-Ring	Silicon			
	17	Oil-Seal	Buna N	NBR		
	18	Gasket	Non Asbestos			VALQUA 6601
	19	Set Screw	Stainless Steel			
	20	Eye Bolt	Steel + Galvanizing			
OPTION	OP-01	Stem Nut	Bronze	HBsC4	B505-C86300	NOTE, 3
	OP-02	Hand Wheel	Steel Pipe	SGP	A53	HANDLE PART NOTE, 5
	OP-03	Key	Carbon Steel	S45C	A576-1045	
	OP-04	Name Plate	Stainless Steel			
	OP-05	Washer	Stainless Steel			
	OP-06	HEX, Bolt (S/W)	Stainless Steel			STEM COVER NOTE,6
	OP-07	Stem Cover	Steel Pipe	SGP	A53	
	OP-08	Indicate Bolt	Steel + Galvanizing			
	OP-09	HEX, Nut	Steel + Galvanizing			
	OP-10	Indicator	Plastic			

## 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), etc.
- O-Ring Seal & Lubricant : Standard is Silicon & 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 (-13° F~752° F)  
Low Temperature Silicone O-Ring, Temperature Range -60° C to +150° C (-76° F to +302° F)  
Lubricant - Zenith SBLT600, Temperature Range -60° C~120° C (-76° F~248° 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 vp134 Red epoxy primer. SAMBO can provide finish coating upon request.

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\* Mark has been changed and updated.



**A**

	Standard Type A Vertical Input	078 · 079
	Standard Type A - Thrust & Torque (Twin Shaft) Vertical Input with Single Reduction Gear Attachment	080 · 081

**B**

	Standard Type B Horizontal Input	082 · 083
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**C**

	Standard Type C - High Load Thrust & Torque Vertical Input	084 · 085
	Standard Type C - High Load Thrust & Torque (Twin Shaft) Vertical Input with Single Reduction Gear Attachment	086 · 087
	Standard Type C - High Load Thrust & Torque Horizontal Input	088 · 089

Spur Gear



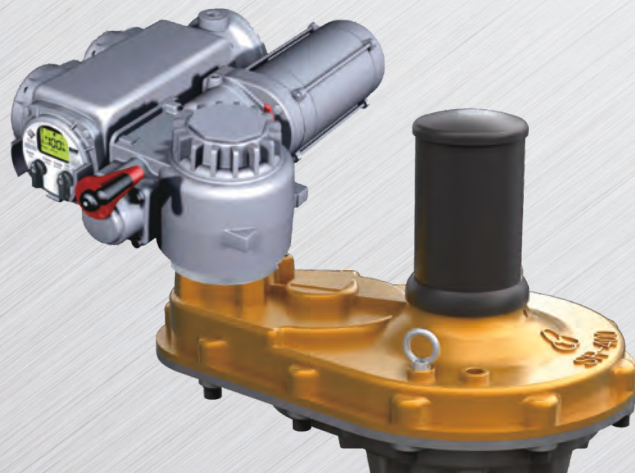
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PRODUCTS

Global Leader  
**SAMBO**  
GEAR ACTUATORS for Industrial Valves

*Spur Gear Actuators*  
*The World's*  
*Highest Quality!*



Spur Gear

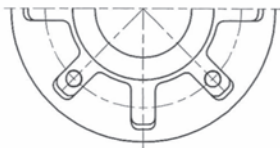
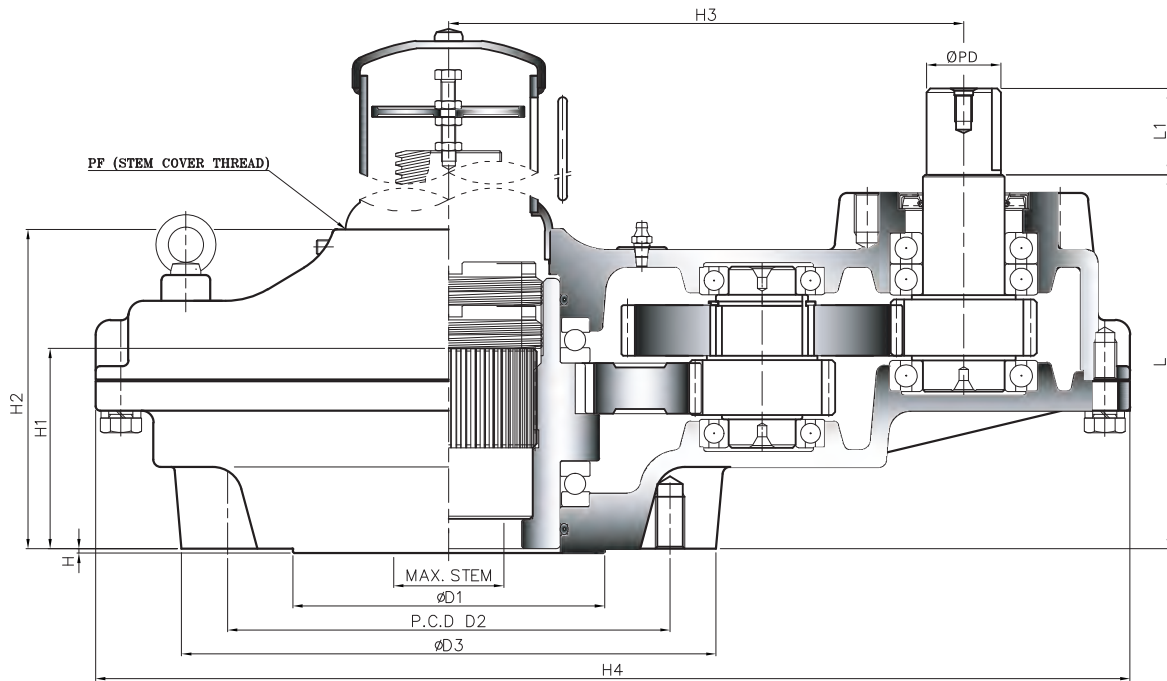
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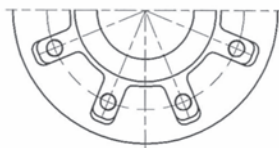
# SAMBO

## STANDARD TYPE-A

### Vertical Input



TYPE - A



TYPE - B



TYPE - C

## Dimension >>>

UNIT : mm

MODEL	DIM	BASE PART						EXTERNAL PART					INPUT SHAFT PART			HAND WHEEL	STEM COVER					
		TYPE	FLANGE	ØD1	P.C.D		ØD3	H	H1	H2	H3	H4	L	L1	ØPD			KEY				
					ØD2	N-H-DP																
SB-SR50	A	F-12	85	125	4-M12-18	150	3	63	106	161	335	128	34	26	8X7	200	PF2-1/2"					
SB-SR100		F-16	130	165	4-M20-30	210		87	143	191,5	400	164				250	PF3"					
SB-SR200	B	F-16 (F-20)	140	205	8-M16-24	250	3	91	160	230	480	180	34	32	10X8	300	PF3-1/2"					
SB-SR300		F-25	200	254	8-M16-24	300		99	168	279	570	197				400	PF4"					
SB-SR350		F-30	230	298	8-M20-30	319		121	196	315	630	218				44	38	12X8	400	PF5"		
SB-SR400		F-30	230	298	8-M20-30	350		133	215	346	691	239				44	38	12X8	500	PF6"		
SB-SR500		F-35	260	356	8-M30-45	415		165	252	398	790	278							500	PF6"		
SB-SR550		F-40	300	406	8-M36-55	449		172	263	413	840	302				58	50	16X10	500	PF6"		
SB-SR600		F-40	300	406	8-M36-55	475		182	279	437,5	890	320							500	PF8"		
SB-SR700		F-48	370	483	12-M36-55	560		206	309	503	1030	353							630	PF8"		
SB-SR750		C	F-48	370	483	12-M36-55		595	5	220	334	527				1095	383	58	50	16X10	710	PF10"
SB-SR800			F-48	370	483	12-M36-55		630		233	354	559				1160	406				710	PF10"

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## Feature >>>

- This series suitable for use with Gate & Globe type valve. Also sluice gates and any other type requiring linear motion for thrust and torque applications.
- Unique Top Entry Replaceable Stem Nut. High Tensile Aluminum bronze material providing corrosion and abrasion resistance.
- Castings are Ductile Iron, class 65-45-12 providing high strength and impact resistance.
- Heavy duty roller bearings supporting both radial & axial thrust loads.
- Gears are Machine cut, heat treated and ground for optimum operation. Units are completely O-Ring Sealed suitable for temporary submergence to meet Ip67 class.
- Many options, such as hand wheels, chain wheels, stem covers, position dial indicators are available.



## Extension Dial Type >>>



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Spur Gear

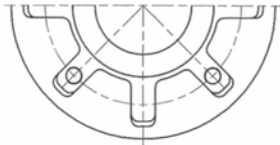
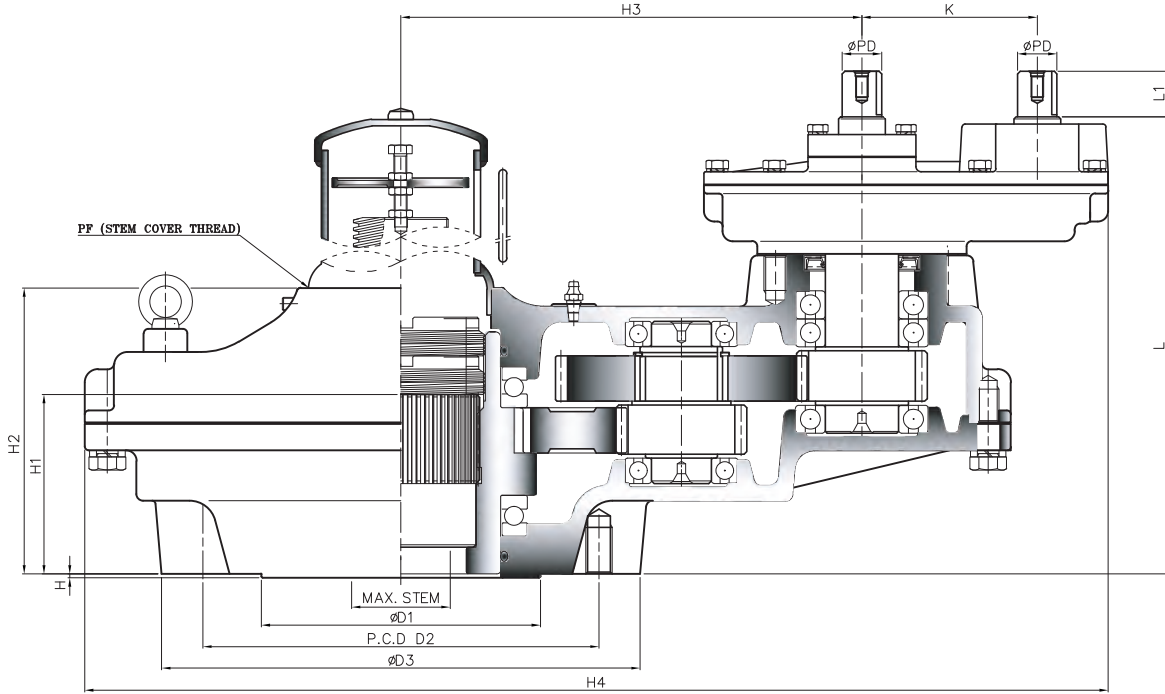
## Selection Chart for Manual Operation >>>

SIZE MODEL	GEAR RATIO (Changeable)	MAX. STEM ACCEPTANCE		BASE MOUNTING OPTION & STANDARD	MAX. THRUST CAPACITY		MAX. TORQUE CAPACITY		WEIGHT Kg
		TW	KEY		KN	lbf	N-m	Ft. lbf	
SB-SR50	2~10:1	40	32 (10X8)	F-10, F-12	113	25400	370	273	16
SB-SR100	2.5~12:1	55	45 (14X9)	F-14, F-16	141	31700	980	723	35
SB-SR200	3~12:1	62	52 (16X10)	F-14, F-16, (F-20)	190	42710	1500	1106	48
SB-SR300	3~13:1	72	60 (18X11)	F-16, (F-20), F-25	288	64750	2500	1844	70
SB-SR350	4~13:1	85	72 (20X12)	F-25, F-30	350	78680	3500	2581	101
SB-SR400	4~14:1	98	84 (22X14)	F-25, F-30	400	89920	5200	3835	132
SB-SR500	4~15:1	110	95 (28X16)	F-30, F-35	510	114650	7800	5753	220
SB-SR550	4~15:1	120	105 (28X16)	F-35, F-40	1500	337210	10400	7671	273
SB-SR600	5~16:1	130	115 (32X18)	F-35, F-40	2310	519300	13000	9588	325
SB-SR700	5~17:1	150	130 (36X20)	F-40, F-48	2500	562020	17600	12981	448
SB-SR750	5~17:1	160	140 (36X20)	F-48	3450	775590	21000	15489	539
SB-SR800	5~17:1	180	160 (40X22)	F-48	4100	921700	32000	23602	630

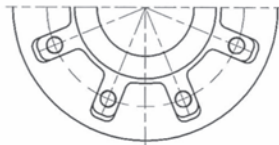
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# STANDARD TYPE-A Twin Shaft Thrust & Torque(Twin Shaft) Vertical Input with Single Reduction Gear Attachment



TYPE - A



TYPE - B



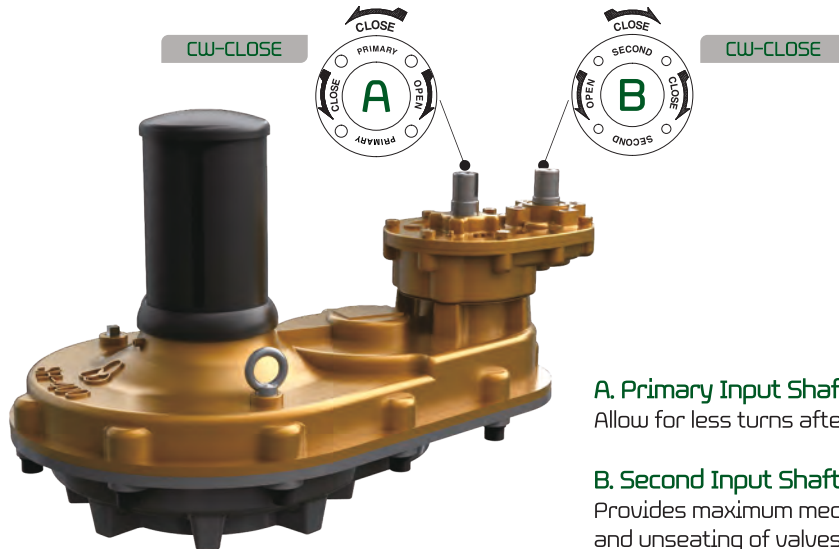
TYPE - C

## Dimension >>>

UNIT : mm

DIM MODEL	BASE PART						EXTERNAL PART						INPUT SHAFT PART			HAND WHEEL	STEM COVER					
	TYPE	FLANGE	ØD1	P.C.D		ØD3	H	H1	H2	H3	H4	K	L	L1	ØPD			KEY				
				ØD2	N-H-DP																	
SB-SR50-1ST	A	F-12	85	125	4-M12-18	150	3	63	106	161	393	79	205	34	26	8X7	200	PF2-1/2"				
SB-SR100-1ST		F-16	130	165	4-M20-30	210		87	143	191.5	453.5		238				250	PF3"				
SB-SR200-1ST	B	F-16 (F-20)	140	205	8-M16-24	250	3	91	160	230	531	93	258.5	34	26	8X7	300	PF3-1/2"				
SB-SR300-1ST		F-25	200	254	8-M16-24	300		99	168	279	615		276.5				400	PF4"				
SB-SR350-1ST		F-30	230	298	8-M20-30	319		121	196	315	705		321				400	PF5"				
SB-SR400-1ST		F-30	230	298	8-M20-30	350		133	215	346	756		121				341	34	32	10X8	500	PF6"
SB-SR500-1ST		F-35	260	356	8-M30-45	415		165	252	398	841		382				500	PF6"				
SB-SR550-1ST		F-40	300	406	8-M36-55	449		172	263	413	915		145				411	44	38	12X8	500	PF6"
SB-SR600-1ST		F-40	300	406	8-M36-55	475		182	279	437.5	987		169				455	44	38	12X8	500	PF8"
SB-SR700-1ST		F-48	370	483	12-M36-55	560		206	309	503	1101		169				486	44	38	12X8	630	PF8"
SB-SR750-1ST	C	F-48	370	483	12-M36-55	595	5	220	334	527	1240	230	606	58	50	16X10	710	PF10"				
SB-SR800-1ST		F-48	370	483	12-M36-55	630		233	354	559	1295	230	628	58	50	16X10	710	PF10"				

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**A. Primary Input Shaft (High Speed Input Shaft)**  
Allow for less turns after valve has been unseating.

**B. Second Input Shaft (Low Speed Input Shaft)**  
Provides maximum mechanical advantage for seating and unseating of valves.

## Feature >>>

- This series suitable for use with Gate & Globe type valve. Also sluice gates and any other type requiring linear motion for thrust and torque applications.
- Unique Top Entry Replaceable Stem Nut. High Tensile Aluminum bronze material providing corrosion and abrasion resistance.
- Castings are Ductile Iron, class 65-45-12 providing high strength and impact resistance.
- Heavy duty roller bearings supporting both radial & axial thrust loads.
- Gears are Machine cut, heat treated and ground for optimum operation. Units are completely O-Ring Sealed suitable for temporary submergence to meet Ip67 class.
- Many options, such as hand wheels, stem covers are available.



## The World's Highest Quality!

Spur Gear

## Selection Chart for Manual Operation >>>

SIZE MODEL	MAX. GEAR RATIO (Changeable)		MAX. STEM ACCEPTANCE		BASE MOUNTING OPTION & STANDARD	MAX. THRUST CAPACITY		MAX. TORQUE CAPACITY		WEIGHT Kg
	PRIMARY	SECOND	TW	KEY		KN	lbf	N-m	Ft. lbf	
SB-SR50-1ST	10:1	20:1	40	32 (10X8)	F-10, F-12	113	25400	370	273	20
SB-SR100-1ST	12:1	24:1	55	45 (14X9)	F-14, F-16	141	31700	980	723	39
SB-SR200-1ST	12:1	30:1	62	52 (16X10)	F-14, F-16, (F-20)	190	42710	1500	1106	56
SB-SR300-1ST	13:1	32.5:1	72	60 (18X11)	F-16, (F-20), F-25	288	64750	2500	1844	78
SB-SR350-1ST	13:1	32.5:1	85	72 (20X12)	F-25, F-30	350	78680	3500	2581	111
SB-SR400-1ST	14:1	35.4:1	98	84 (22X14)	F-25, F-30	400	89920	5200	3835	144
SB-SR500-1ST	15:1	35.4:1	110	95 (28X16)	F-30, F-35	510	114650	7800	5753	232
SB-SR550-1ST	15:1	52.5:1	120	105 (28X16)	F-35, F-40	1500	337210	10400	7671	293
SB-SR600-1ST	16:1	64:1	130	115 (32X18)	F-35, F-40	2310	519300	13000	9588	353
SB-SR700-1ST	17:1	68:1	150	130 (36X20)	F-40, F-48	2500	562020	17600	12981	476
SB-SR750-1ST	17:1	85:1	160	140 (36X20)	F-48	3450	775590	21000	15489	589
SB-SR800-1ST	17:1	85:1	180	160 (40X22)	F-48	4100	921700	32000	23602	702

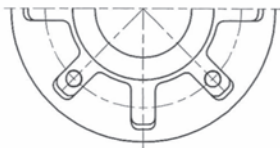
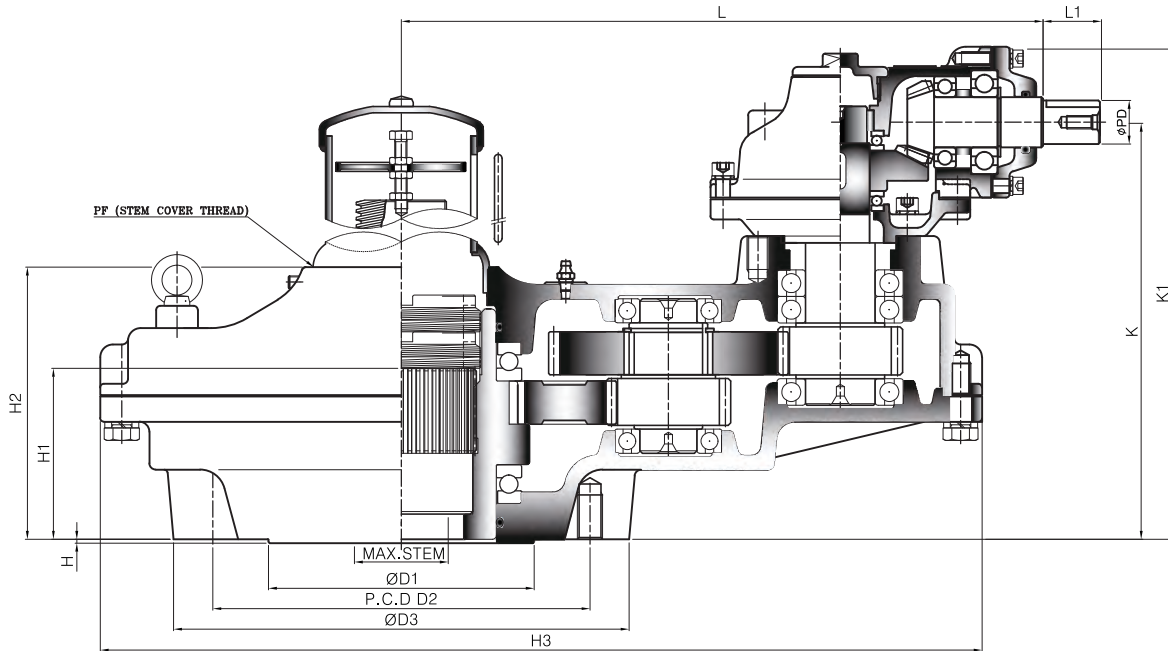
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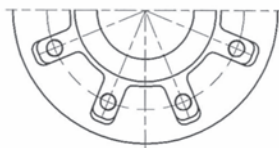
# SAMBO

## STANDARD TYPE-B

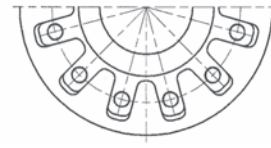
### Horizontal Input



TYPE - A



TYPE - B



TYPE - C

## Dimension >>>

UNIT : mm

DIM MODEL	BASE PART						EXTERNAL PART						INPUT SHAFT PART			HAND WHEEL	STEM COVER				
	TYPE	FLANGE	ØD1	P.C.D		ØD3	H	H1	H2	H3	K	K1	L	L1	ØPD			KEY			
				ØD2	N-H-DP																
SB-SR50-2B	A	F-12	85	125	4-M12-18	150	3	63	106	335	174	214	250	34	26	8X7	250	PF2-1/2"			
SB-SR100-2B		F-16	130	165	4-M20-30	210		87	143	400	204	244	280,5				250	PF3"			
SB-SR200-2B	B	F-16 (F-20)	140	205	8-M16-24	250	3	91	160	480	239	289	351	34	26	8X7	300	PF3-1/2"			
SB-SR300-2B		F-25	200	254	8-M16-24	300		99	168	570	249	299	400				400	PF4"			
SB-SR350-2B		F-30	230	298	8-M20-30	319		121	196	630	278	328	446				400	PF5"			
SB-SR400-2B		F-30	230	298	8-M20-30	350		133	215	691	298,5	348,5	477				500	PF6"			
SB-SR500-2B		F-35	260	356	8-M30-45	415		165	252	790	383	448	586				630	PF6"			
SB-SR550-2B		F-40	300	406	8-M36-55	449		172	263	840	404	470	601				34	32	10X8	630	PF6"
SB-SR600-2B		F-40	300	406	8-M36-55	475		182	279	890	424,5	489,5	625,5				630	PF8"			
SB-SR700-2B		F-48	370	483	12-M36-55	560		206	309	1030	508	573	711				34	32	10X8	630	PF8"
SB-SR750-2B	C	F-48	370	483	12-M36-55	595	5	220	334	1095	553	635	793	44	38	12X8	710	PF10"			
SB-SR800-2B		F-48	370	483	12-M36-55	630		236	354	1160	575	657	825	44	38	12X8	710	PF10"			

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## Feature >>>

- This series suitable for use with Gate & Globe type valve. Also sluice gates and any other type requiring linear motion for thrust and torque applications.
- Unique Top Entry Replaceable Stem Nut. High Tensile Aluminum bronze material providing corrosion and abrasion resistance.
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Spur Gear

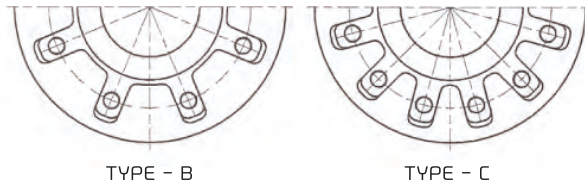
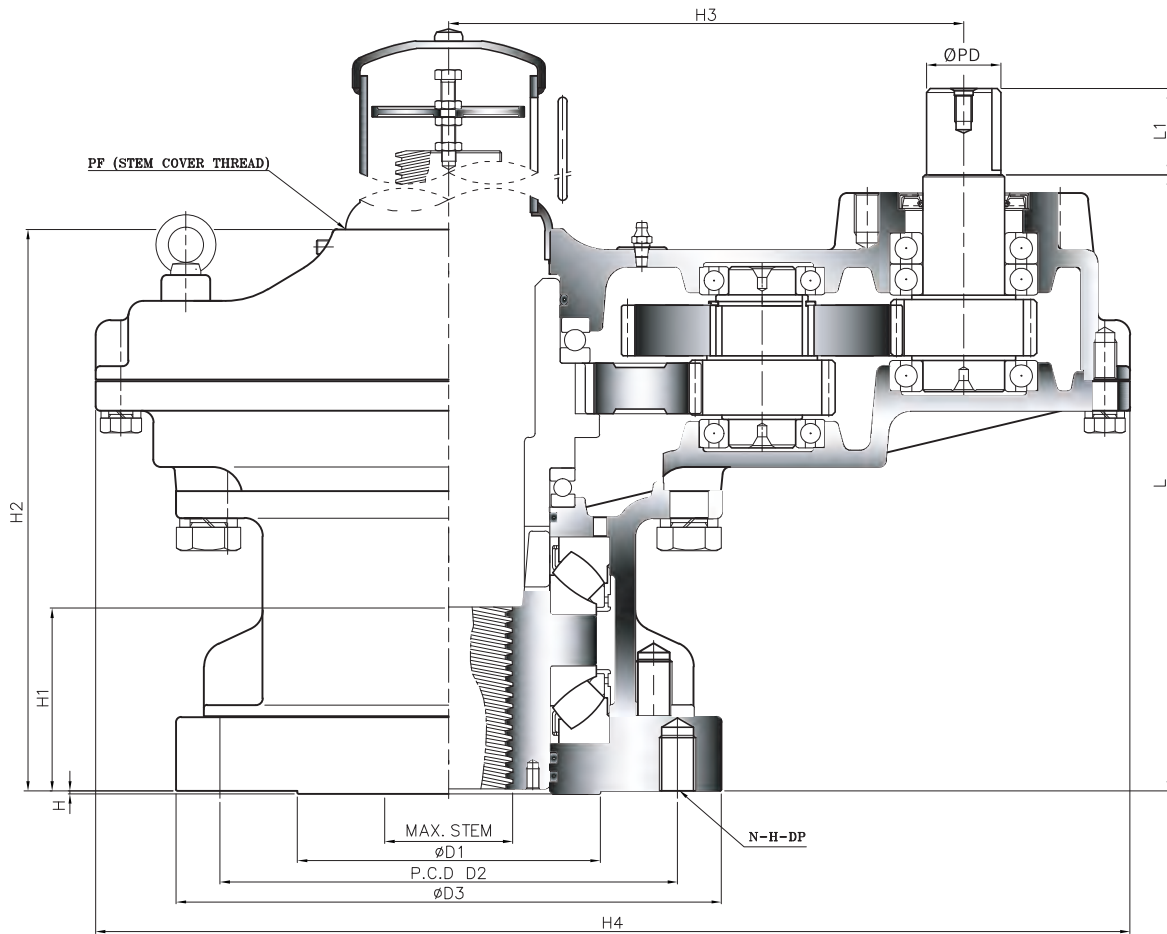
## Selection Chart for Manual Operation >>>

MODEL	SIZE GEAR RATIO (Changeable)	MAX. STEM ACCEPTANCE		BASE MOUNTING OPTION & STANDARD	MAX. THRUST CAPACITY		MAX. TORQUE CAPACITY		WEIGHT Kg
		TW	KEY		KN	lbf	N-m	Ft. lbf	
SB-SR50-2B	4~20:1	40	32 (10X8)	F-10, F-12	113	25400	370	273	21
SB-SR100-2B	5~24:1	55	45 (14X9)	F-14, F-16	141	31700	980	723	40
SB-SR200-2B	7.5~30:1	62	52 (16X10)	F-14, F-16, (F-20)	190	42710	1500	1106	56
SB-SR300-2B	7.5~32:1	72	60 (18X11)	F-16, (F-20), F-25	288	64750	2500	1844	78
SB-SR350-2B	12~39:1	85	72 (20X12)	F-25, F-30	350	78680	3500	2581	110
SB-SR400-2B	12~42:1	98	84 (22X14)	F-25, F-30	400	89920	5200	3835	142
SB-SR500-2B	16~60:1	110	95 (28X16)	F-30, F-35	510	114650	7800	5753	253
SB-SR550-2B	16~60:1	120	105 (28X16)	F-35, F-40	1500	337210	10400	7671	306
SB-SR600-2B	20~64:1	130	115 (32X18)	F-35, F-40	2310	519300	13000	9588	358
SB-SR700-2B	25~85:1	150	130 (36X20)	F-40, F-48	2500	562020	17600	12981	492
SB-SR750-2B	27.5~93.5:1	160	140 (36X20)	F-48	3450	775590	21000	15489	600
SB-SR800-2B	27.5~93.5:1	180	160 (40X22)	F-48	4100	921700	32000	23602	707

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\* Mark has been changed and updated.



# STANDARD TYPE-C High Load Thrust & Torque Vertical Input



Spur Gear

## Dimension >>>

UNIT : mm

DIM MODEL	BASE PART						EXTERNAL PART					INPUT SHAFT PART			HAND WHEEL	STEM COVER				
	TYPE	FLANGE	ØD1	P.C.D		ØD3	H	H1	H2	H3	H4	L	L1	ØPD			KEY			
				ØD2	N-H-DP															
SB-SR200H	B	F-25	200	254	8-M16-24	300	3	99	317	230	480	337	34	32	10X8	300	PF3-1/2"			
SB-SR300H		F-30	230	298	8-M20-30	350		118	351	279	570	380				400	PF4"			
SB-SR350H		F-30	230	298	8-M20-30	350		118	388	315	630	410				44	38	12X8	400	PF5"
SB-SR400H		F-35	260	356	8-M30-45	415		143	412	346	691	436				44	38	12X8	500	PF6"
SB-SR500H		F-35	260	356	8-M30-45	415		155	473	398	790	499							500	PF6"
SB-SR550H		F-40	300	406	8-M36-55	475		170	528.5	413	840	569				58	50	16X10	500	PF6"
SB-SR600H		F-40	300	406	8-M36-55	475		170	520	437.5	890	563							500	PF8"
SB-SR700H	C	F-48	370	483	12-M36-55	560	5	197	613	503	1030	657	58	50	16X10	630	PF8"			
SB-SR750H		F-48	370	483	12-M36-55	560		217	668	527	1095	717				710	PF10"			
SB-SR800H		F-48	370	483	12-M36-55	560		217	689	559	1160	746				710	PF10"			

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 \* Mark has been changed and updated.



## Feature >>>

- This series suitable for use with Gate & Globe type valve. Also sluice gates and any other type requiring linear motion for thrust and torque applications.
- Unique Top Entry Replaceable Stem Nut. High Tensile Aluminum bronze material providing corrosion and abrasion resistance.
- Castings are Ductile Iron, class 65-45-12 providing high strength and impact resistance.
- Heavy duty roller bearings supporting both radial & axial thrust loads.
- Gears are Machine cut, heat treated and ground for optimum operation. Units are completely O-Ring Sealed suitable for temporary submergence to meet Ip67 class.
- Many options, such as hand wheels, stem covers are available.



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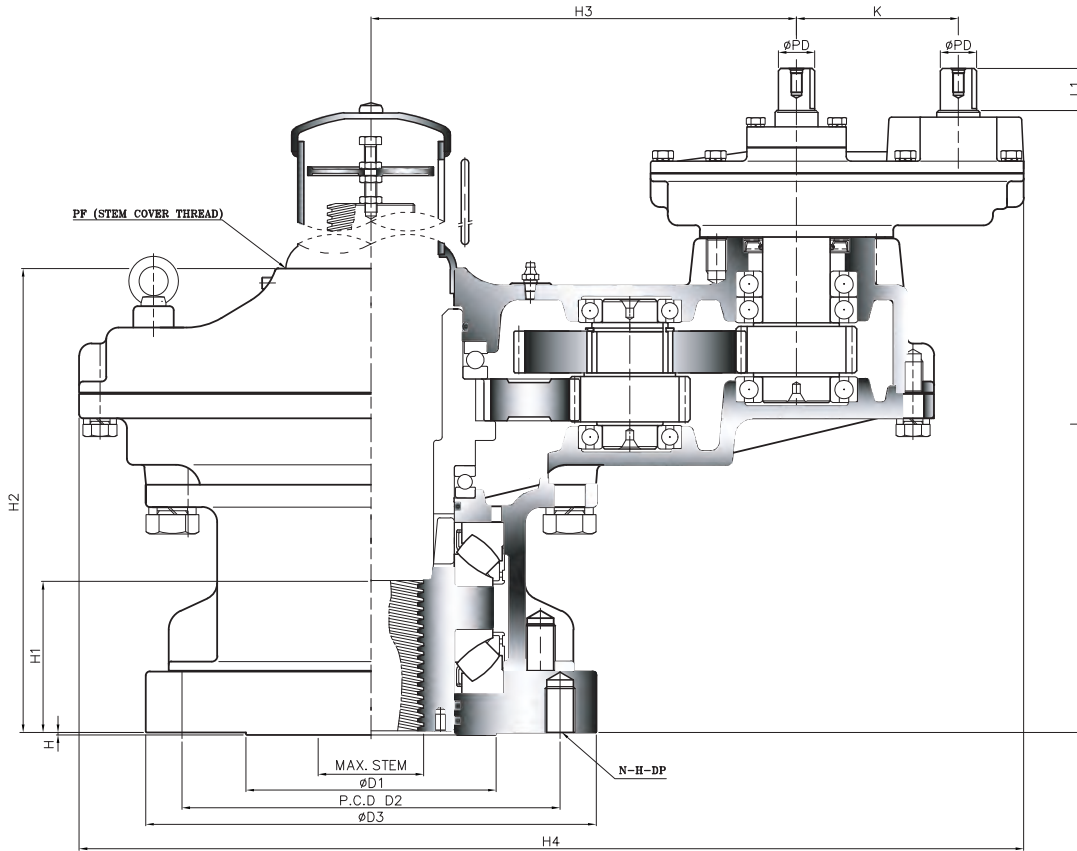
## Selection Chart for Manual Operation >>>

MODEL \ SIZE	GEAR RATIO (Changeable)	MAX. STEM ACCEPTANCE		BASE MOUNTING OPTION & STANDARD	MAX. THRUST CAPACITY		MAX. TORQUE CAPACITY		WEIGHT
		TW	KEY		KN	lbf	N-m	Ft. lbf	
SB-SR200H	3~12:1	65	55 (16X10)	(F-20), F-25	1080	242800	2900	2139	78
SB-SR300H	3~13:1	80	70 (20X12)	F-25, F-30	1710	384400	4500	3319	126
SB-SR350H	4~13:1	80	70(20X12)	F-25, F-30	1710	384400	7000	5163	157
SB-SR400H	4~14:1	95	85 (22X14)	F-25, F-30, F-35	2450	550800	9800	7228	188
SB-SR500H	4~15:1	110	95 (25X14)	F-25, F-30, F-35	2900	651900	15000	11063	330
SB-SR550H	4~15:1	120	105 (28X16)	F-30, F-35, F-40	3400	764350	19000	14013	402
SB-SR600H	5~16:1	130	115 (32X18)	F-30, F-35, F-40	3500	786800	23000	16964	474
SB-SR700H	5~17:1	150	130 (36X20)	F-35, F-40, F-48	4700	1056600	37000	27290	710
SB-SR750H	5~17:1	160	140 (36X20)	F-48	5000	1124045	46000	33928	852
SB-SR800H	5~17:1	170	160 (40X22)	F-48	5200	1169000	58000	42778	994

Size and component specification in this catalogue are subject to change without prior notice for quality improvement.  
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# STANDARD TYPE-C High Load Thrust & Torque (Twin Shaft) Vertical Input with Single Reduction Gear Attachment



TYPE - B

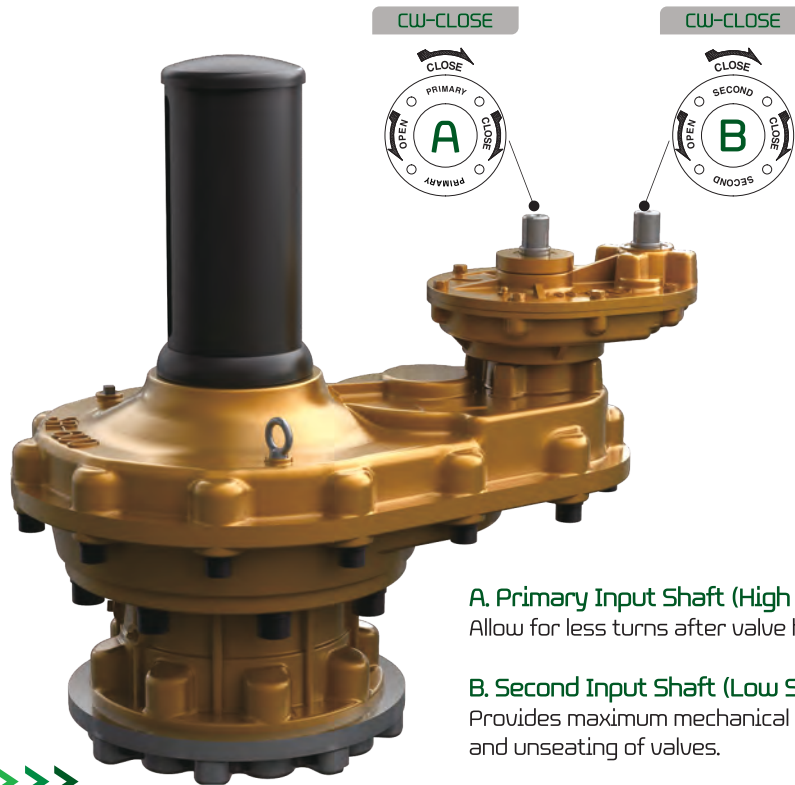
TYPE - C

## Dimension >>>

UNIT : mm

DIM MODEL	BASE PART						EXTERNAL PART						INPUT SHAFT PART			HAND WHEEL	STEM COVER					
	TYPE	FLANGE	ØD1	P.C.D		ØD3	H	H1	H2	H3	H4	K	L	L1	ØPD			KEY				
				ØD2	N-H-DP																	
SB-SR200H-1ST	B	F-25	200	254	8-M16-24	300	3	99	317	230	531	93	416	34	26	8X7	300	PF3-1/2"				
SB-SR300H-1ST		F-30	230	298	8-M20-30	350		118	351	279	615		459									
SB-SR350H-1ST		F-30	230	298	8-M20-30	350		118	388	315	705		513									
SB-SR400H-1ST		F-35	260	356	8-M30-45	415		143	412	346	756	121	538				34		32	10X8	500	PF6"
SB-SR500H-1ST		F-35	260	356	8-M30-45	415		155	473	398	841	603	500								PF6"	
SB-SR550H-1ST		F-40	300	406	8-M36-55	475		170	528.5	413	915	145	678				500		PF6"			
SB-SR600H-1ST		F-40	300	406	8-M36-55	475		170	520	437.5	987	169	696				44		38	12X8	500	PF8"
SB-SR700H-1ST	C	F-48	370	483	12-M36-55	560	5	197	613	503	1101	169	790	44	38	12X8	630	PF8"				
SB-SR750H-1ST		F-48	370	483	12-M36-55	560		217	668	527	1240	230	940	58	50	16X10	710	PF10"				
SB-SR800H-1ST		F-48	370	483	12-M36-55	560		217	689	559	1295	230	963	58	50	16X10	710	PF10"				

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**A. Primary Input Shaft (High Speed Input Shaft)**  
Allow for less turns after valve has been unseating.

**B. Second Input Shaft (Low Speed Input Shaft)**  
Provides maximum mechanical advantage for seating and unseating of valves.

## Feature >>>

- This series suitable for use with Gate & Globe type valve. Also sluice gates and any other type requiring linear motion for thrust and torque applications.
- Unique Top Entry Replaceable Stem Nut. High Tensile Aluminum bronze material providing corrosion and abrasion resistance.
- Castings are Ductile Iron, class 65-45-12 providing high strength and impact resistance.
- Heavy duty roller bearings supporting both radial & axial thrust loads.
- Gears are Machine cut, heat treated and ground for optimum operation. Units are completely O-Ring Sealed suitable for temporary submergence to meet Ip67 class.
- Many options, such as hand wheels, stem covers are available.



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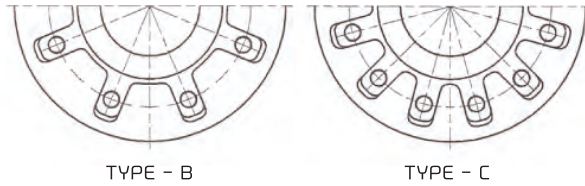
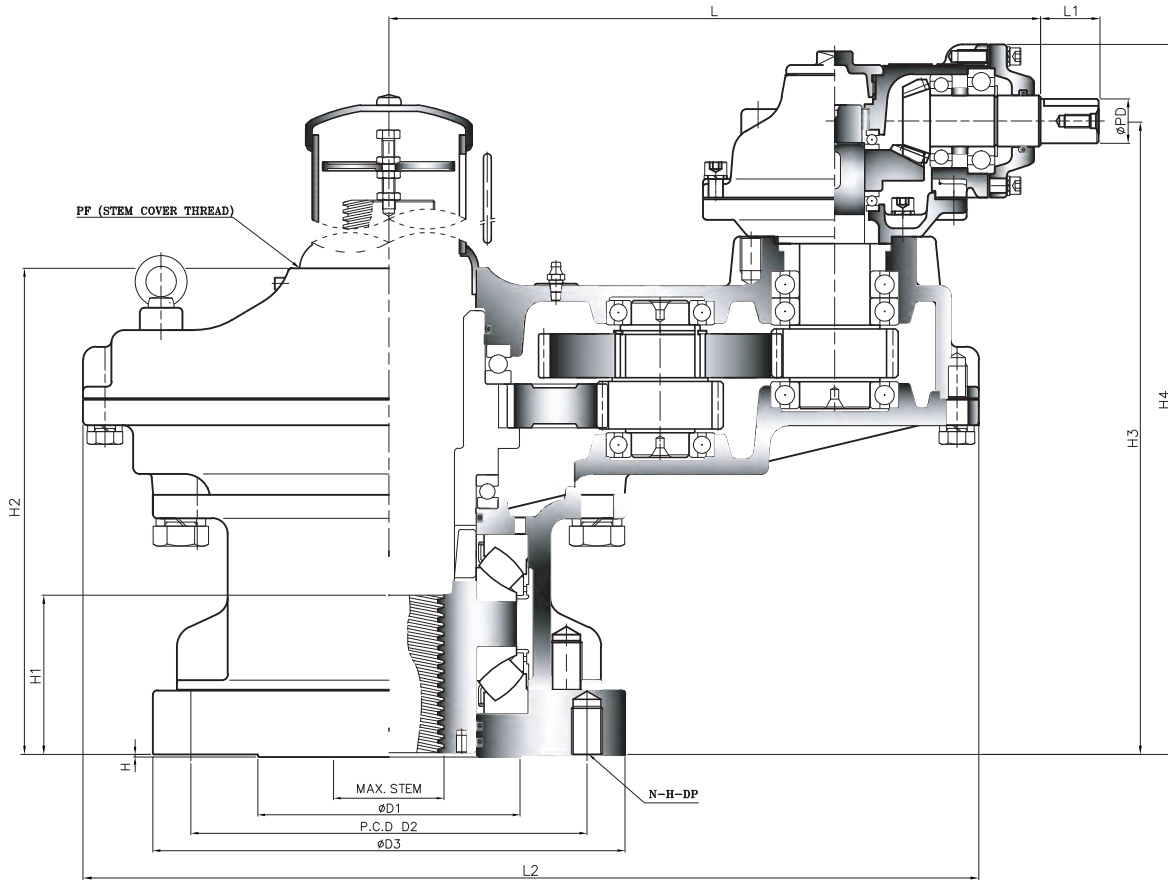
## Selection Chart for Manual Operation >>>

SIZE MODEL	MAX. GEAR RATIO (Changeable)		MAX. STEM ACCEPTANCE		BASE MOUNTING OPTION & STANDARD	MAX. THRUST CAPACITY		MAX. TORQUE CAPACITY		WEIGHT Kg
	PRIMARY	SECOND	TW	KEY		KN	lbf	N-m	Ft. lbf	
SB-SR200H-1ST	12:1	30:1	65	55 (16X10)	F-20, F-25	1080	242800	2900	2139	86
SB-SR300H-1ST	13:1	33:1	80	70 (20X12)	F-25, F-30	1710	384400	4500	3319	134
SB-SR350H-1ST	13:1	39:1	80	70 (20X12)	F-25, F-30	1710	384400	7000	5163	167
SB-SR400H-1ST	14:1	42:1	95	85 (22X14)	F-25, F-30, F-35	2450	550800	9800	7228	200
SB-SR500H-1ST	15:1	45:1	110	95 (25X14)	F-25, F-30, F-35	2900	651900	15000	11063	342
SB-SR550H-1ST	15:1	52.5:1	120	105 (28X16)	F-30, F-35, F-40	3400	764350	19000	14013	422
SB-SR600H-1ST	16:1	64:1	130	115 (32X18)	F-30, F-35, F-40	3500	786800	23000	16964	502
SB-SR700H-1ST	17:1	68:1	150	130 (36X20)	F-35, F-40, F-48	4700	1056600	37000	27290	738
SB-SR750H-1ST	17:1	85:1	160	140 (36X20)	F-48	5000	1124045	46000	33928	902
SB-SR800H-1ST	17:1	85:1	170	160 (40X22)	F-48	5200	1169000	58000	42778	1066

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# STANDARD TYPE-C High Load Thrust & Torque Horizontal Input



## Dimension >>>

UNIT : mm

DIM MODEL	BASE PART						EXTERNAL PART						INPUT SHAFT PART			HAND WHEEL	STEM COVER		
	TYPE	FLANGE	ØD1	P.C,D		ØD3	H	H1	H2	H3	H4	L2	L	L1	ØPD			KEY	
				ØD2	N-H-DP														
SB-SR200H-2B	B	F-25	200	254	8-M16-24	300	3	99	317	396	446	480	351	34	26	8X7	300	PF3-1/2"	
SB-SR300H-2B		F-30	230	298	8-M20-30	350		118	351	432	482	570	400					400	PF4"
SB-SR350H-2B		F-30	230	298	8-M20-30	350		118	388	469	519	630	446					400	PF6"
SB-SR400H-2B		F-35	260	356	8-M30-45	415		143	412	495,5	545,5	691	477					500	PF6"
SB-SR500H-2B		F-35	260	356	8-M30-45	415		155	473	603,5	668,5	790	586					500	PF6"
SB-SR550H-2B		F-40	300	406	8-M36-55	475		170	528,5	678	737	840	601					500	PF6"
SB-SR600H-2B		F-40	300	406	8-M36-55	475		170	520	665,5	730	890	625,5					500	PF8"
SB-SR700H-2B		F-48	370	483	12-M36-55	560		197	613	781	846	1030	711					630	PF8"
SB-SR750H-2B	C	F-48	370	483	12-M36-55	560	5	217	668	887	969	1095	793	44	38	12X8	710	PF10"	
SB-SR800H-2B		F-48	370	483	12-M36-55	560		217	689	910	993	1160	825	44	38	12X8	710	PF10"	



## Feature >>>

- This series suitable for use with Gate & Globe type valve. Also sluice gates and any other type requiring linear motion for thrust and torque applications.
- Unique Top Entry Replaceable Stem Nut. High Tensile Aluminum bronze material providing corrosion and abrasion resistance.
- Castings are Ductile Iron, class 65-45-12 providing high strength and impact resistance.
- Heavy duty roller bearings supporting both radial & axial thrust loads.
- Gears are Machine cut, heat treated and ground for optimum operation. Units are completely O-Ring Sealed suitable for temporary submergence to meet Ip67 class.
- Many options, such as hand wheels, stem covers are available.



The World's  
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## Selection Chart for Manual Operation >>>

MODEL \ SIZE	GEAR RATIO (Changeable)	MAX. STEM ACCEPTANCE		BASE MOUNTING OPTION & STANDARD	MAX. THRUST CAPACITY		MAX. TORQUE CAPACITY		WEIGHT
		TW	KEY		KN	lbf	N-m	Ft. lbf	
SB-SR200H-2B	7.5~30:1	65	55 (16X10)	(F-20), F-25	1080	242800	2900	2139	86
SB-SR300H-2B	7.5~32:1	80	70 (20X12)	F-25, F-30	1710	384400	4500	3319	134
SB-SR350H-2B	12~42:1	80	70 (20X12)	F-25, F-30	1710	384400	7000	5163	166
SB-SR400H-2B	12~42:1	95	85 (22X14)	F-25, F-30, F-35	2450	550800	9800	7228	198
SB-SR500H-2B	16~60:1	110	95 (25X14)	F-25, F-30, F-35	2900	651900	15000	11063	363
SB-SR550H-2B	16~60:1	120	105 (28X16)	F-30, F-35, F-40	3400	764350	19000	14013	435
SB-SR600H-2B	20~64:1	130	115 (32X18)	F-30, F-35, F-40	3500	786800	23000	16964	507
SB-SR700H-2B	25~85:1	150	130 (36X20)	F-35, F-40, F-48	4700	1056600	37000	27290	754
SB-SR750H-2B	27.5~93.5:1	160	140 (36X20)	F-48	5000	1124045	46000	33928	913
SB-SR800H-2B	27.5~93.5:1	170	160 (40X22)	F-48	5200	1169000	58000	42778	1071

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