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Spur Gear Actuators



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Standard Type C - High Load

Thrust & Torque (Twin Shaft) Vertical Input
with Single Reduction Gear Attachment

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Standard Type C - High Load

Thrust & Torque Horizontal Input

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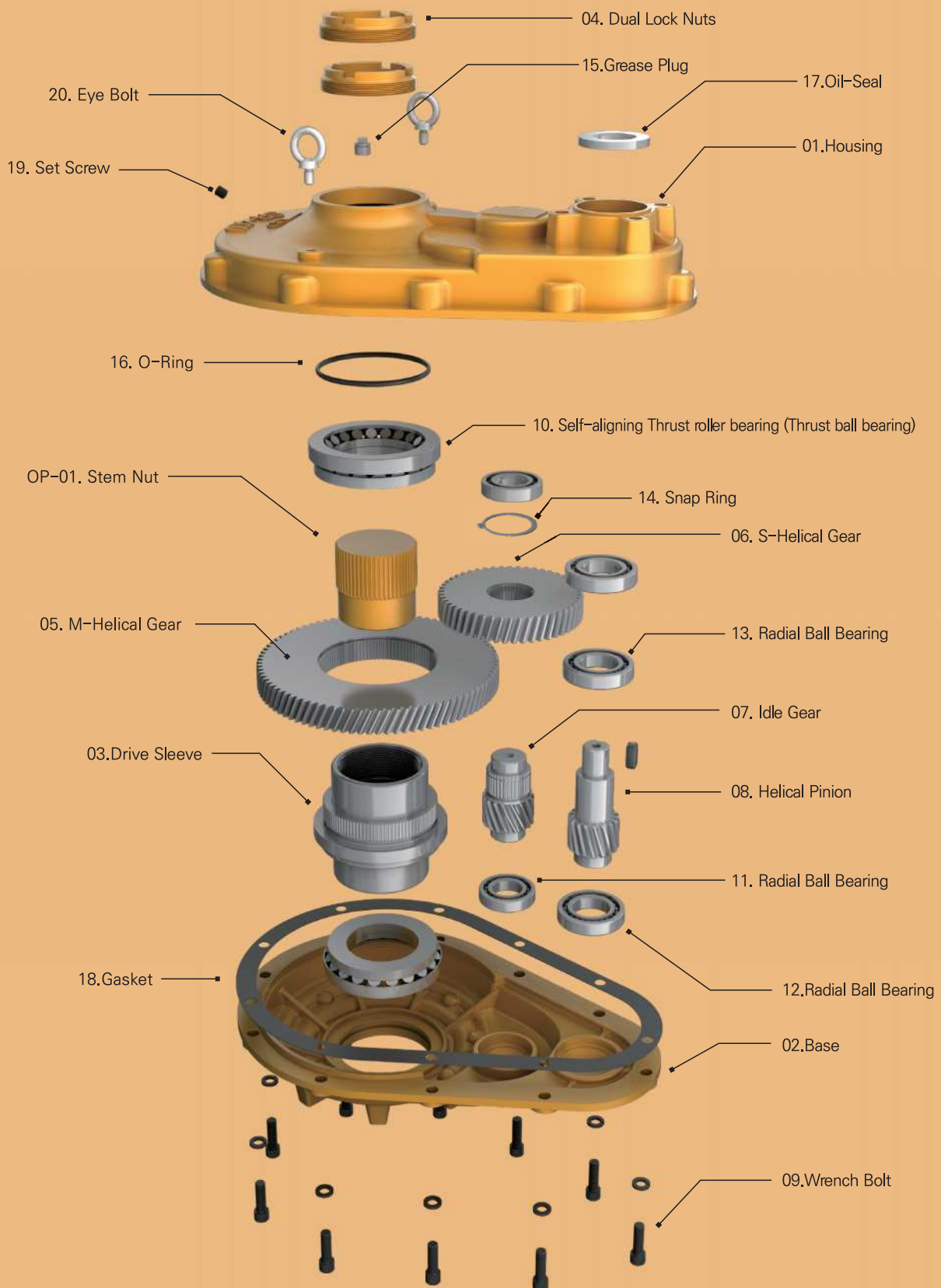
PRODUCTS

Spur Gear Actuators



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

Spur Gear Actuator Assembly



❖ Part List & Material

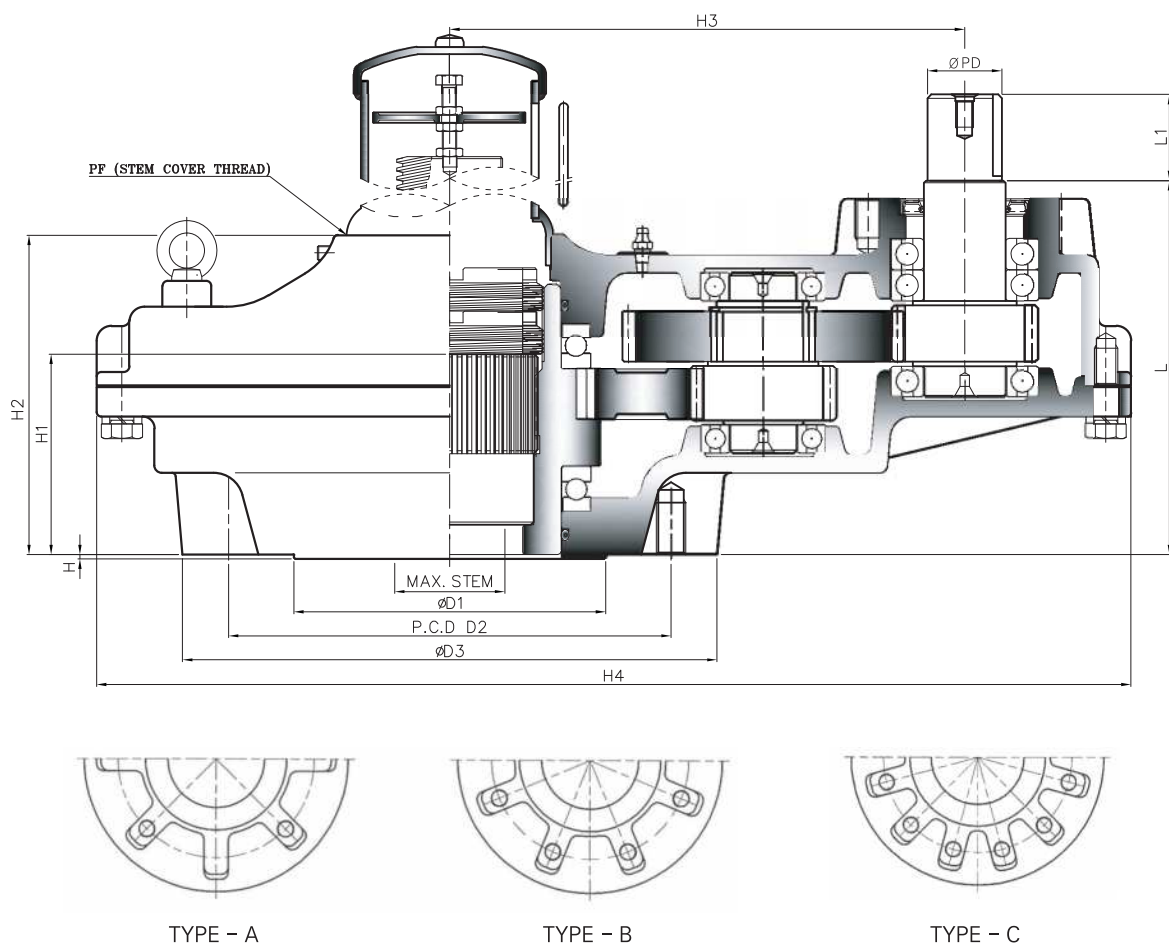
	NO	DESCRIPTION	MATERIAL			REMARK
			NAME	JIS	ASTM	
STANDARD	1	Housing	Ductile Iron	FCD-450	A536-65-45-12	
	2	Base	Ductile Iron	FCD-450	A536-65-45-12	
	3	Drive Sleeve	Ductile Iron	FCD-450	A536-65-45-12	
	4	Dual Lock Nuts	Carbon Steel	S45C	A576-1045	
	5	M-Helical Gear	Carbon Steel	S45C	A576-1045	
	6	S-Helical 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	Buna N	NBR		
	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	HBSC3	B584-C86200	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			
	OP-07.	Stem Cover	Steel Pipe	SGP	A53	STEM COVER NOTE.6
	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 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 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.

STANDARD TYPE-A

Vertical 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	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	500	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	58	50	16X10	500	PF6"
SB-SR550		F-40	300	406	8-M36-55	449		172	263	413	840	302				500	PF6"
SB-SR600		F-40	300	406	8-M36-55	475		182	279	437.5	890	320				500	PF8"
SB-SR700		C	F-48	370	483	12-M36-55		560	5	206	309	503	1030	353	58	50	16X10
SB-SR750	F-48		370	483	12-M36-55	595	220	334		527	1095	383	710	PF10"			
SB-SR800	F-48		370	483	12-M36-55	630	233	354		559	1160	406	710	PF10"			

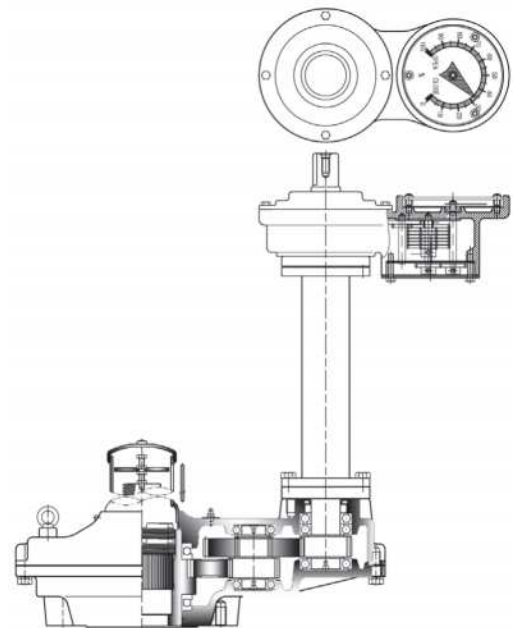
Spur Gear Actuators

❖ 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



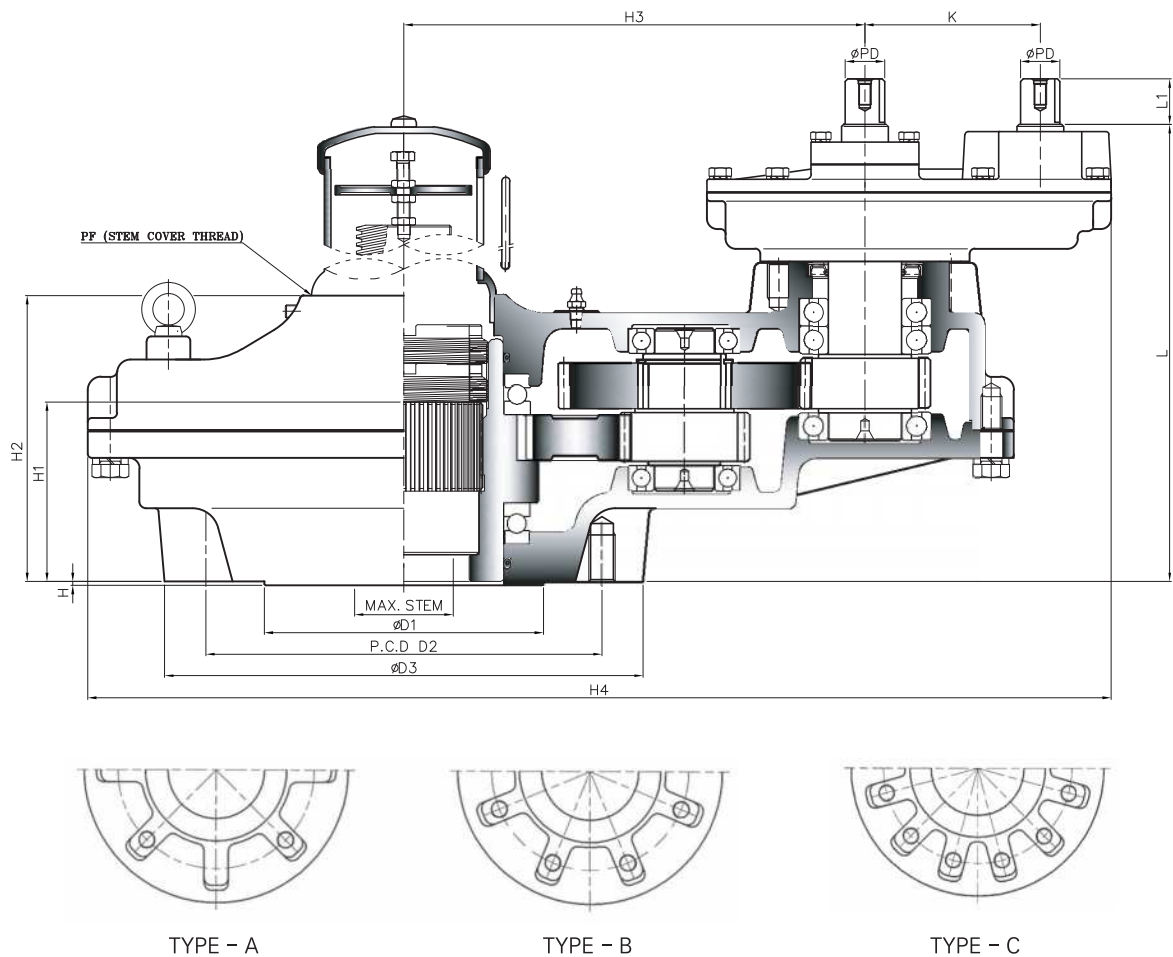
❖ Selection Chart for Manual Operation

SIZE MODEL	GEAR RATIO (Changeable)	MAX. STEM ACCEPTANCE		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	115	100 (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

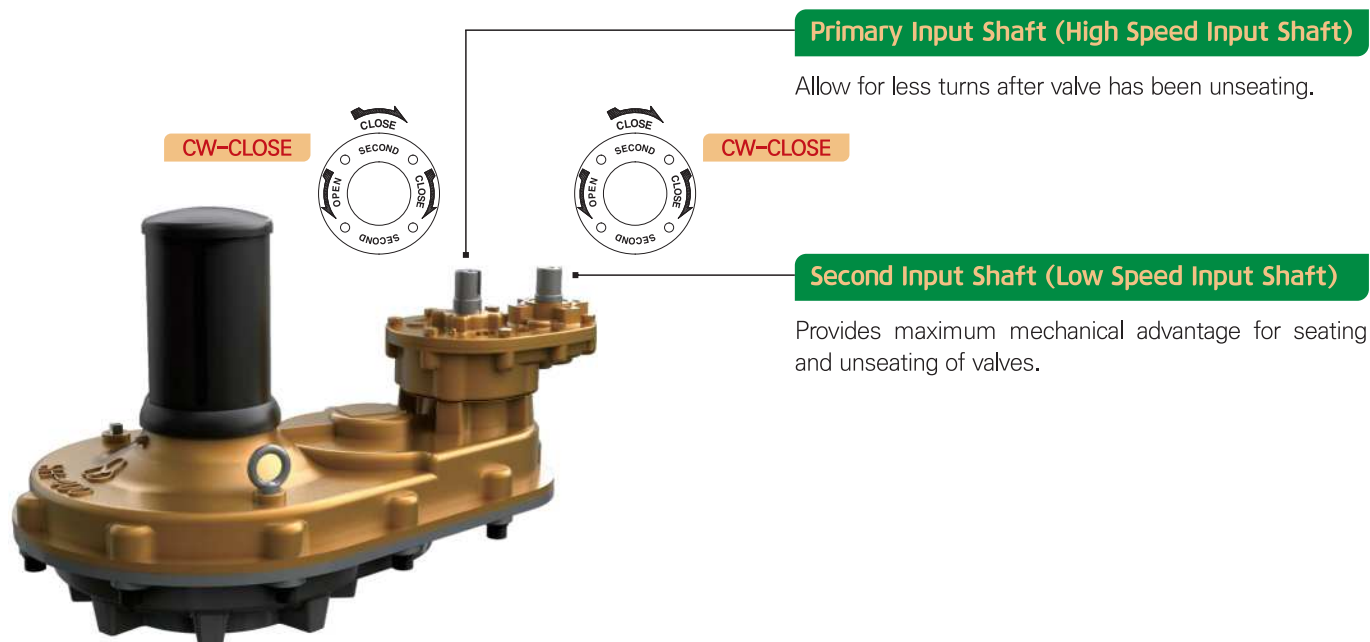


Dimension

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	121	321	34	32	10X8	500	PF5"
SB-SR400-1ST		F-30	230	298	8-M20-30	350		133	215	346	756		341				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				500	PF8"
SB-SR700-1ST	C	F-48	370	483	12-M36-55	560	5	206	309	503	1101	169	486	44	38	12X8	630	PF8"
SB-SR750-1ST		F-48	370	483	12-M36-55	595		220	334	527	1240	230	606				710	PF10"
SB-SR800-1ST		F-48	370	483	12-M36-55	630		233	354	559	1295	230	628				710	PF10"

Spur Gear Actuators



❖ 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.

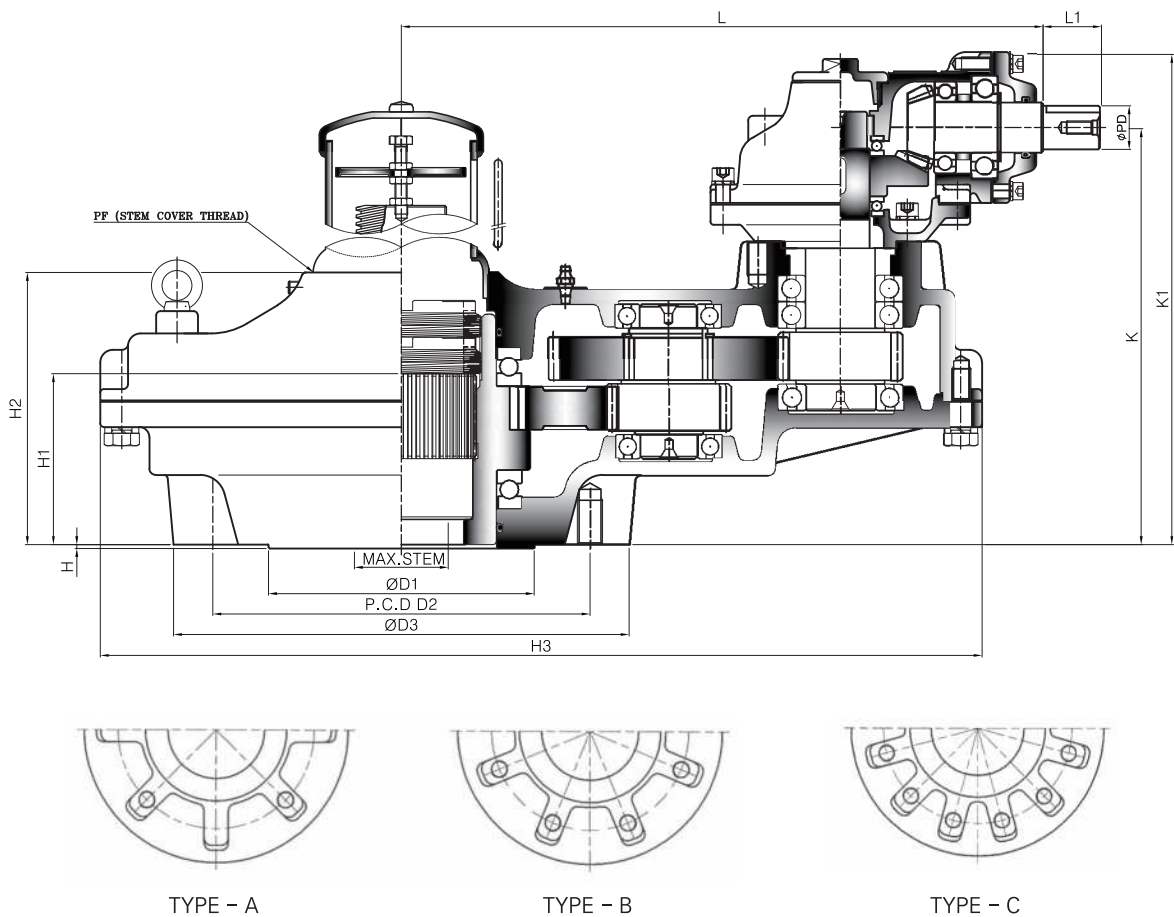
❖ Selection Chart for Manual Operation

SIZE MODEL	MAX. GEAR RATIO (Changeable)		MAX. STEM ACCEPTANCE		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	33 : 1	72	60 (18X11)	F-16, (F-20), F-25	288	64750	2500	1844	78
SB-SR350-1ST	13 : 1	39 : 1	85	72 (20X12)	F-25, F-30	350	78680	3500	2581	111
SB-SR400-1ST	14 : 1	42 : 1	98	84 (22X14)	F-25, F-30	400	89920	5200	3835	144
SB-SR500-1ST	15 : 1	45 : 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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STANDARD TYPE-B

Horizontal Input



Dimension

UNIT : mm

DIM MODEL	BASE PART							EXTERNAL PART						INPUT SHAFT PART			H AND 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	200	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				500	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	34	32	10X8	630	PF6"
SB-SR550-2B		F-40	300	406	8-M36-55	449		172	263	840	404	470	601				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
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"

Spur Gear Actuators



❖ 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.

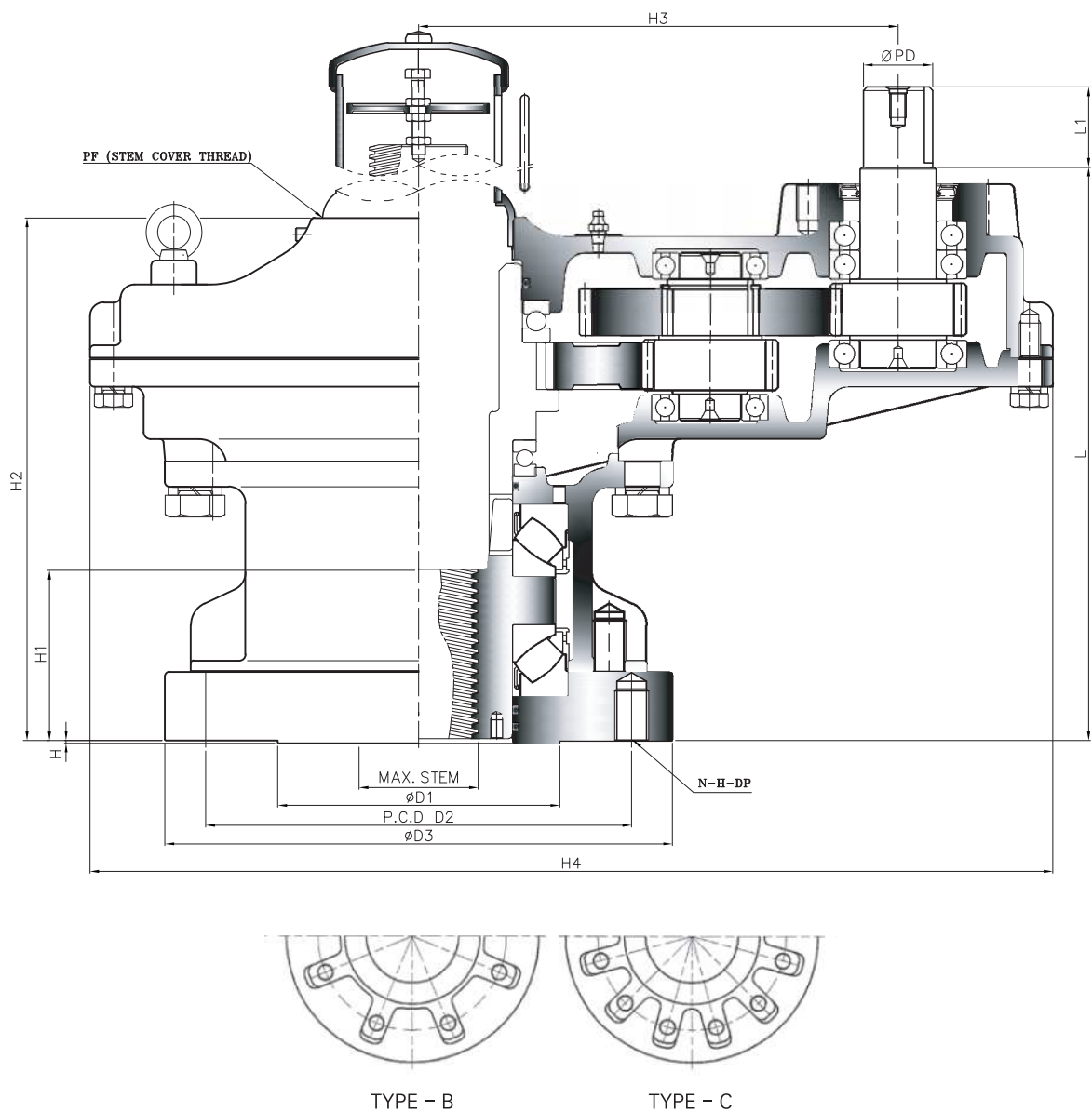
❖ Selection Chart for Manual Operation

SIZE MODEL	GEAR RATIO (Changeable)	MAX. STEM ACCEPTANCE		MOUNTING OPTION & STANDARD	MAX. THRUST CAPACITY		MAX. TORQUE CAPACITY		WEIGHT
		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	115	100 (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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STANDARD TYPE-C High Load

Thrust & Torque Vertical Input



Dimension

UNIT : mm

DIM MODEL	BASE PART							EXTERNAL PART					INPUT SHAFT PART			H AND 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	500	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	58	50	16X10	500	PF6"
SB-SR550H		F-40	300	406	8-M36-55	475		170	528.5	413	840	569				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"

Spur Gear Actuators



❖ Feature

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- Unique Top Entry Replaceable Stem Nut. High Tensile Aluminum bronze material providing corrosion and abrasion resistance.
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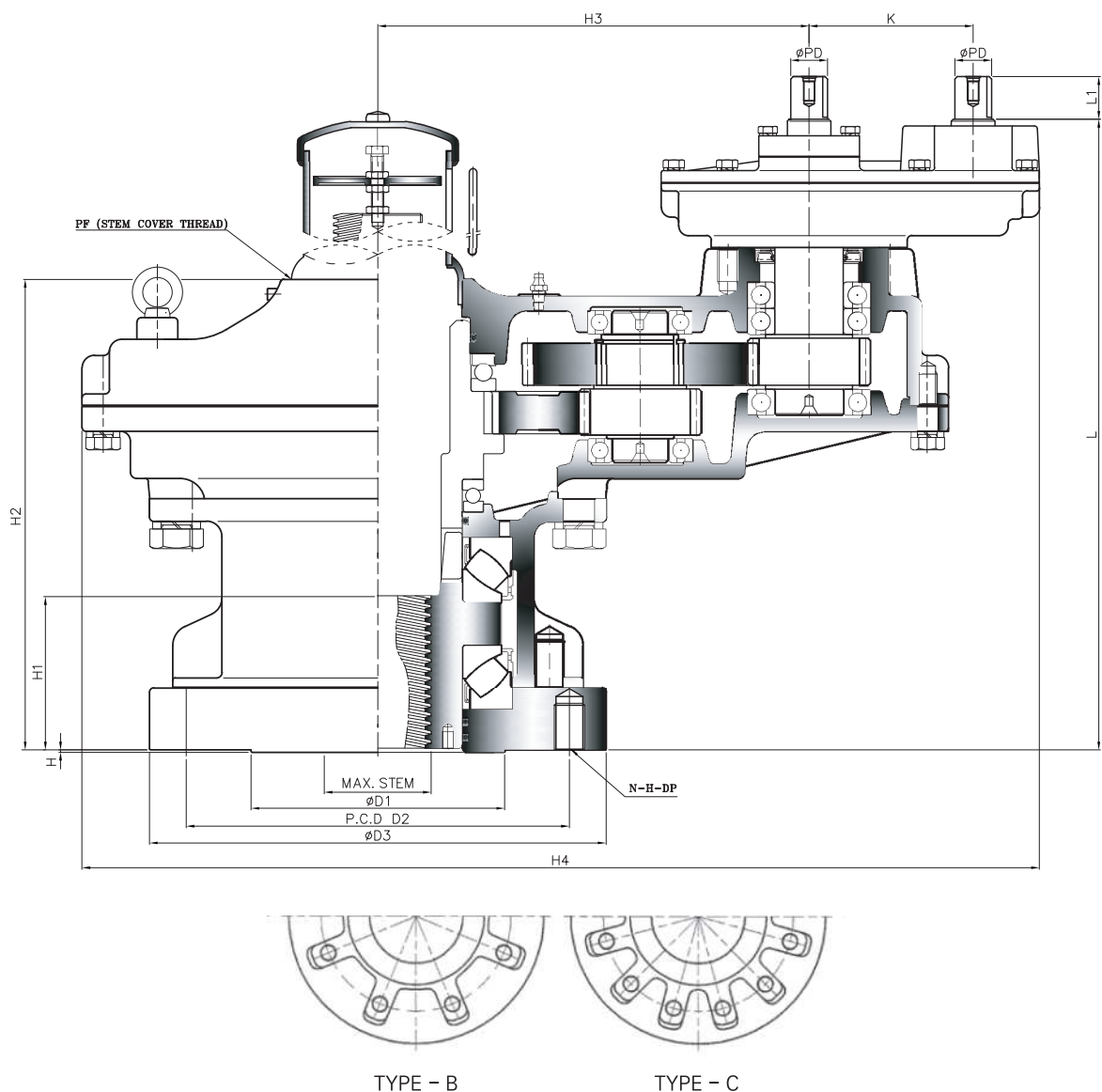
❖ Selection Chart for Manual Operation

SIZE MODEL	GEAR RATIO (Changeable)	MAX. STEM ACCEPTANCE		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	85	72(20X12)	F-25, F-30	2100	472099	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

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STANDARD TYPE-C High Load

Thrust & Torque (Twin Shaft) Vertical Input with Single Reduction Gear Attachment

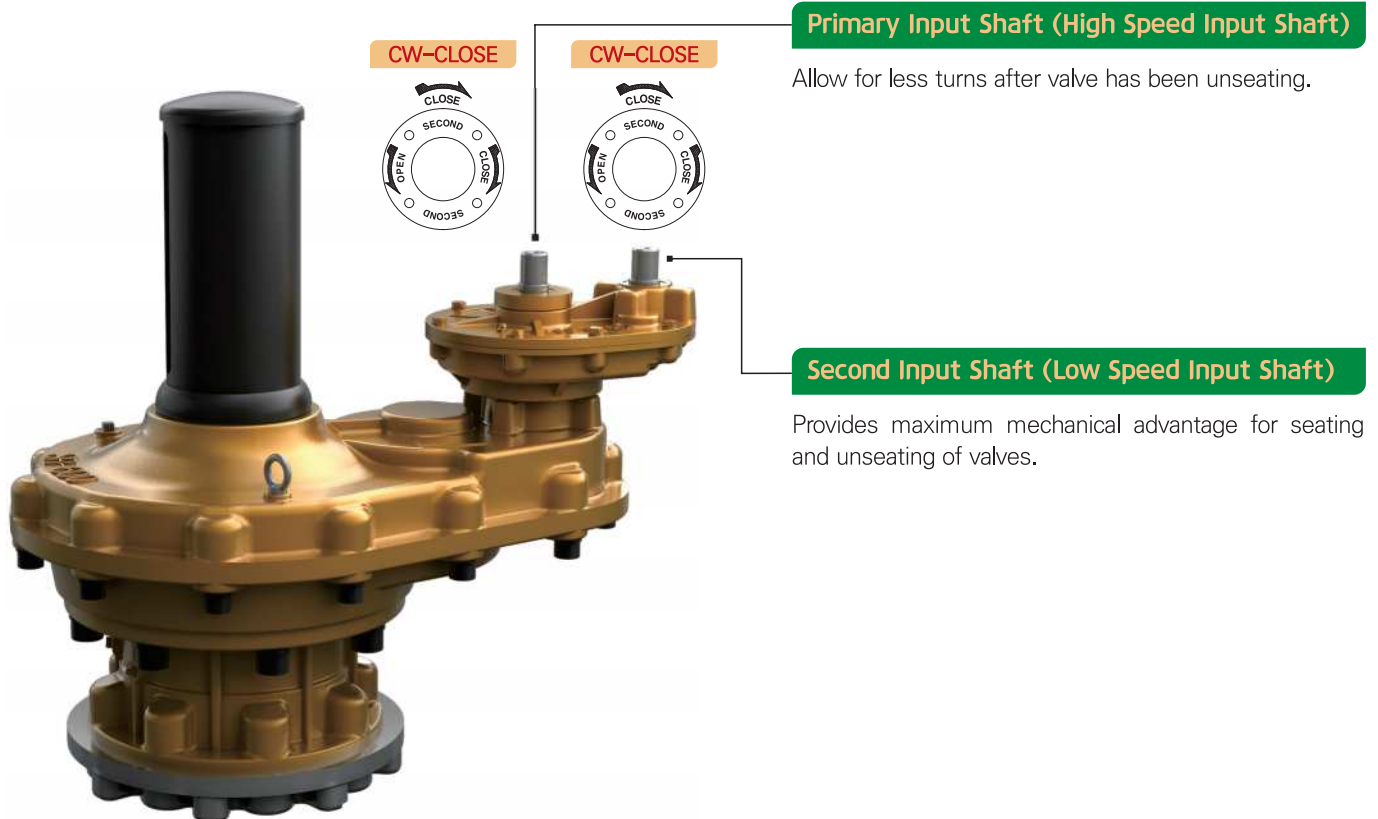


Dimension

UNIT : mm

DIM MODEL	BASE PART							EXTERNAL PART						INPUT SHAFT PART			H AND 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				400	PF4"
SB-SR350H-1ST		F-30	230	298	8-M20-30	350		118	388	315	705		513				500	PF6"
SB-SR400H-1ST		F-35	260	356	8-M30-45	415		143	412	346	756	121	538				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"

Spur Gear Actuators



❖ 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.

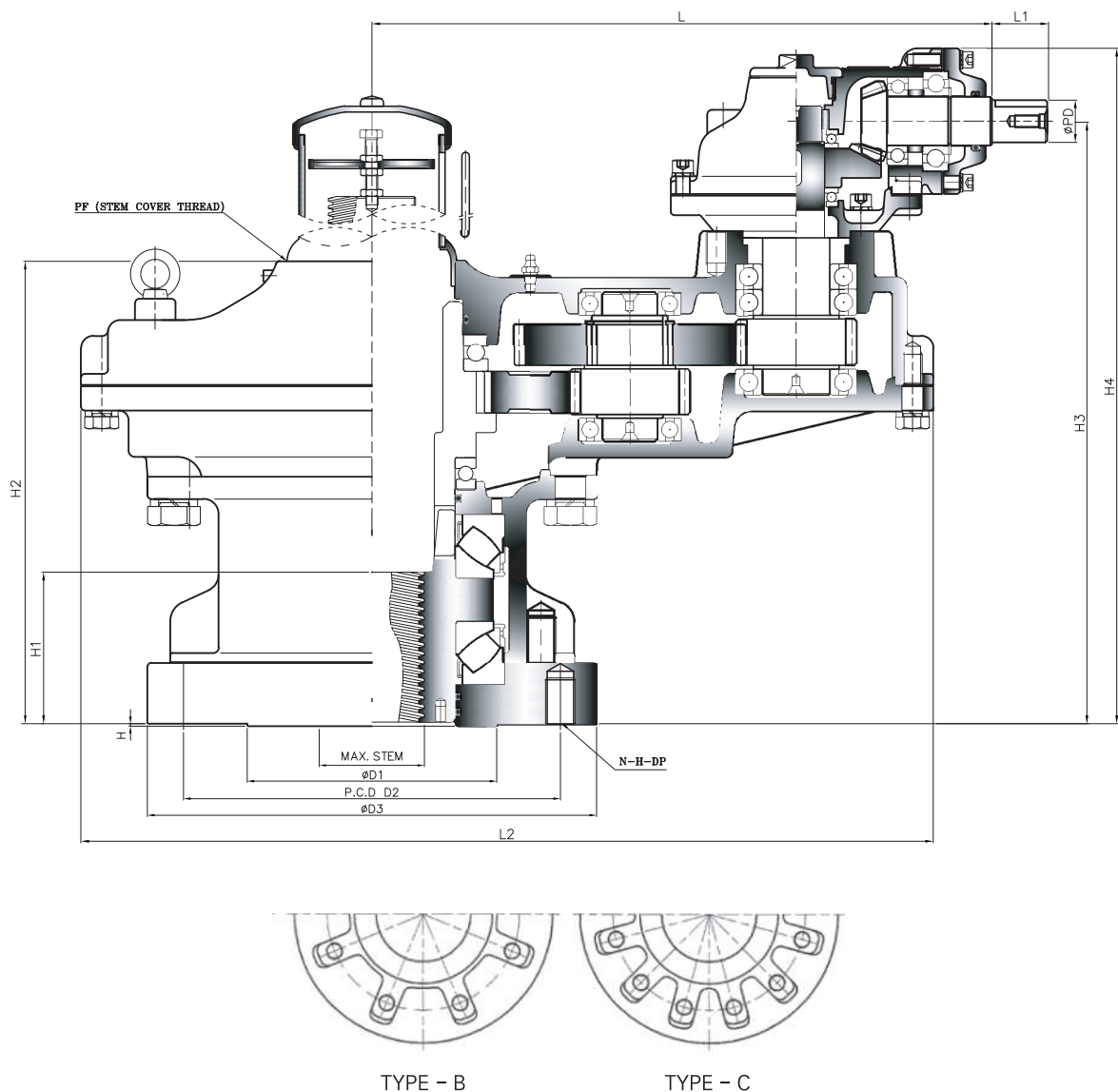
❖ Selection Chart for Manual Operation

SIZE MODEL	MAX. GEAR RATIO (Changeable)		MAX. STEM ACCEPTANCE		MOUNTING OPTION & STANDARD	MAX. THRUST CAPACITY		MAX. TORQUE CAPACITY		WEIGHT
	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	85	72(20X12)	F-25, F-30	2100	472099	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

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

STANDARD TYPE-C High Load

Thrust & Torque Horizontal Input



Dimension

UNIT : mm

DIM MODEL	BASE PART							EXTERNAL PART						INPUT SHAFT PART			H AND 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				500	PF6"			
SB-SR400H-2B		F-35	260	356	8-M30-45	415		143	412	495.5	545.5	691	477				34	32	10X8	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	C	F-48	370	483	12-M36-55	560	5	197	613	781	846	1030	711	34	32	10X8	630	PF8"			
SB-SR750H-2B		F-48	370	483	12-M36-55	560		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"			

Spur Gear Actuators



❖ 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.

❖ Selection Chart for Manual Operation

SIZE MODEL	GEAR RATIO (Changeable)	MAX. STEM ACCEPTANCE		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	85	72(20X12)	F-25, F-30	2100	472099	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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Spur Gear Actuators Technical Data



Model	Ratio	Max. Thrust Capacity (KN)	Max. Output Torque		Mechanical Advantage (±10%)	Max. Input Torque (N·m)	Bore Diameter (Stem. Max)		Mounting Flange (ISO5210/1)
			(N·m)	(Ft·lbf)			TW	KEY	
SB-SR50	10:1	113	370	273	9.2	40.2	40	32 (10×8)	F-12 F-10 (OPTION)
SB-SR50-2B	20:1				16.6	22.3			
SB-SR50-1ST	P-10:1				8.5	43.7			
	S-20:1				16.9	21.9			
SB-SR100	12:1	141	980	723	11	88.8	55	45 (14×9)	F-16 F-14 (OPTION)
SB-SR100-2B	24:1				19.9	49.3			
SB-SR100-1ST	P-12:1				10.2	96.5			
	S-24:1				20.3	48.2			
SB-SR200	12:1	190	1500	1106	11	135.9	62	52 (16×10)	(F-20) F-16,F-14 (OPTION)
SB-SR200-2B	30:1				24.8	60.4			
SB-SR200-1ST	P-12:1				10.2	147.7			
	S-30:1				25.4	59.1			
SB-SR200H	12:1	1080	2900	2139	11	262.7	65	55 (16×10)	F-25 (F-20) (OPTION)
SB-SR200H-2B	30:1				24.8	116.7			
SB-SR200H-1ST	P-12:1				10.2	285.5			
	S-30:1				25.4	114.2			
SB-SR300	13:1	288	2500	1844	12	209	72	60 (18×11)	F-25 (F-20), F-16 (OPTION)
SB-SR300-2B	32:1				26.5	94.4			
SB-SR300-1ST	P-13:1				11.0	227.2			
	S-33:1				27.9	89.5			
SB-SR300H	13:1	1710	4500	3319	12	376.3	80	70 (20×12)	F-30 F-25 (OPTION)
SB-SR300H-2B	32:1				26.5	169.8			
SB-SR300H-1ST	P-13:1				11	409			
	S-33:1				27.9	161.1			
SB-SR350	13:1	350	3500	2581	12.0	292.6	85	72 (20×12)	F-30 F-25 (OPTION)
SB-SR350-2B	39:1				32.3	108.4			
SB-SR350-1ST	P-13:1				11.0	318.1			
	S-39:1				33.0	106.0			
SB-SR350H	13:1	2100	7000	5163	12.0	585.3	85	72 (20×12)	F-30 F-25 (OPTION)
SB-SR350H-2B	39:1				32.3	216.8			
SB-SR350H-1ST	P-13:1				11.0	636.2			
	S-39:1				33.0	212.1			
SB-SR400	14:1	400	5200	3835	12.9	403.7	98	82 (22×14)	F-30 F-25 (OPTION)
SB-SR400-2B	42:1				34.8	149.5			
SB-SR400-1ST	P-14:1				11.8	438.8			
	S-42:1				35.5	146.3			
SB-SR400H	14:1	2450	9800	7228	12.9	760.9	95	85 (22×14)	F-35 F-30, F-25 (OPTION)
SB-SR400H-2B	42:1				34.8	281.8			
SB-SR400H-1ST	P-14:1				11.8	827			
	S-42:1				35.5	275.7			
SB-SR500	15:1	510	7800	5753	13.8	565.2	110	95 (28×16)	F-35 F-30 (OPTION)
SB-SR500-2B	60:1				49.7	157			
SB-SR500-1ST	P-15:1				12.7	614.4			
	S-45:1				38.1	204.8			
Remark	● Ratio & Base specification to be changeable.								
	● Max Output Torque includes safety factor.								
	● If any request requirement, please contact us any time.								

Spur Gear Actuators Technical Data

Model	Ratio	Max. Thrust Capacity (KN)	Max. Output Torque		Mechanical Advantage (± 10%)	Max. Input Torque (N·m)	Bore Diameter (Stem. Max)		Mounting Flange (ISO5210/1)
			(N·m)	(Ft·lbf)			TW	KEY	
SB-SR500H	15:1	2900	15000	11063	13.8	1087	110	95 (25x14)	F-35 F-30, F-25 (OPTION)
SB-SR500H-2B	60:1				49.7	301.9			
SB-SR500H-1ST	P-15:1				12.7	1181.5			
	S-45:1				38.1	393.8			
SB-SR550	15:1	1500	10400	7671	13.8	753.6	120	105 (28x16)	F-35 F-30 (OPTION)
SB-SR550-2B	60:1				49.7	209.3			
SB-SR550-1ST	P-15:1				12.7	819.2			
	S-52.5:1				44.4	234.0			
SB-SR550H	15:1	3400	19000	14014	13.8	1376.8	120	105 (28x16)	F-40 F-35,F-30 (OPTION)
SB-SR550H-2B	60:1				49.7	382.4			
SB-SR550H-1ST	P-15:1				12.7	1496.5			
	S-52.5:1				44.4	427.6			
SB-SR600	16:1	2310	13000	9588	14.7	883.2	130	115 (32x18)	F-40 F-35 (OPTION)
SB-SR600-2B	64:1				53	245.3			
SB-SR600-1ST	P-16:1				13.5	959.9			
	S-64:1				54.2	240			
SB-SR600H	16:1	3500	23000	16964	14.7	1562.5	130	115 (32x18)	F-40 F-35, F-30 (OPTION)
SB-SR600H-2B	64:1				53	434			
SB-SR600H-1ST	P-16:1				13.5	1698.4			
	S-64:1				54.2	424.6			
SB-SR700	17:1	2500	17600	12981	15.6	1125.3	150	130 (36x20)	F-48 F-40 (OPTION)
SB-SR700-2B	85:1				70.4	250.1			
SB-SR700-1ST	P-17:1				14.4	1223.2			
	S-68:1				57.6	305.8			
SB-SR700H	17:1	4700	37000	27290	15.6	2365.7	150	130 (36x20)	F-48 F-40, F-35 (OPTION)
SB-SR700H-2B	85:1				70.4	525.7			
SB-SR700H-1ST	P-17:1				14.4	2571.4			
	S-68:1				57.6	642.9			
SB-SR750	17:1	3450	21000	15489	15.6	1342.7	160	140 (36x20)	F-48
SB-SR750-2B	93.5:1				77.4	271.3			
SB-SR750-1ST	P-17:1				14.4	1459.5			
	S-85:1				71.9	291.9			
SB-SR750H	17:1	5000	46000	33928	15.6	2941.2	160	140 (36x20)	F-48
SB-SR750H-2B	93.5:1				77.4	594.2			
SB-SR750H-1ST	P-17:1				14.4	3196.9			
	S-85:1				71.9	639.4			
SB-SR800	17:1	4100	32000	23602	15.6	2046	180	160 (40x22)	F-48
SB-SR800-2B	93.5:1				77.4	413.3			
SB-SR800-1ST	P-17:1				14.4	2224			
	S-85:1				71.9	444.8			
SB-SR800H	17:1	5200	58000	42778	15.6	3708.4	170	150 (40x22)	F-48
SB-SR800H-2B	93.5:1				77.4	749.2			
SB-SR800H-1ST	P-17:1				14.4	4030.9			
	S-85:1				71.9	806.2			
Remark	● Ratio & Base specification to be changeable.								
	● Max Output Torque includes safety factor.								
	● If any request requirement, please contact us any time.								

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