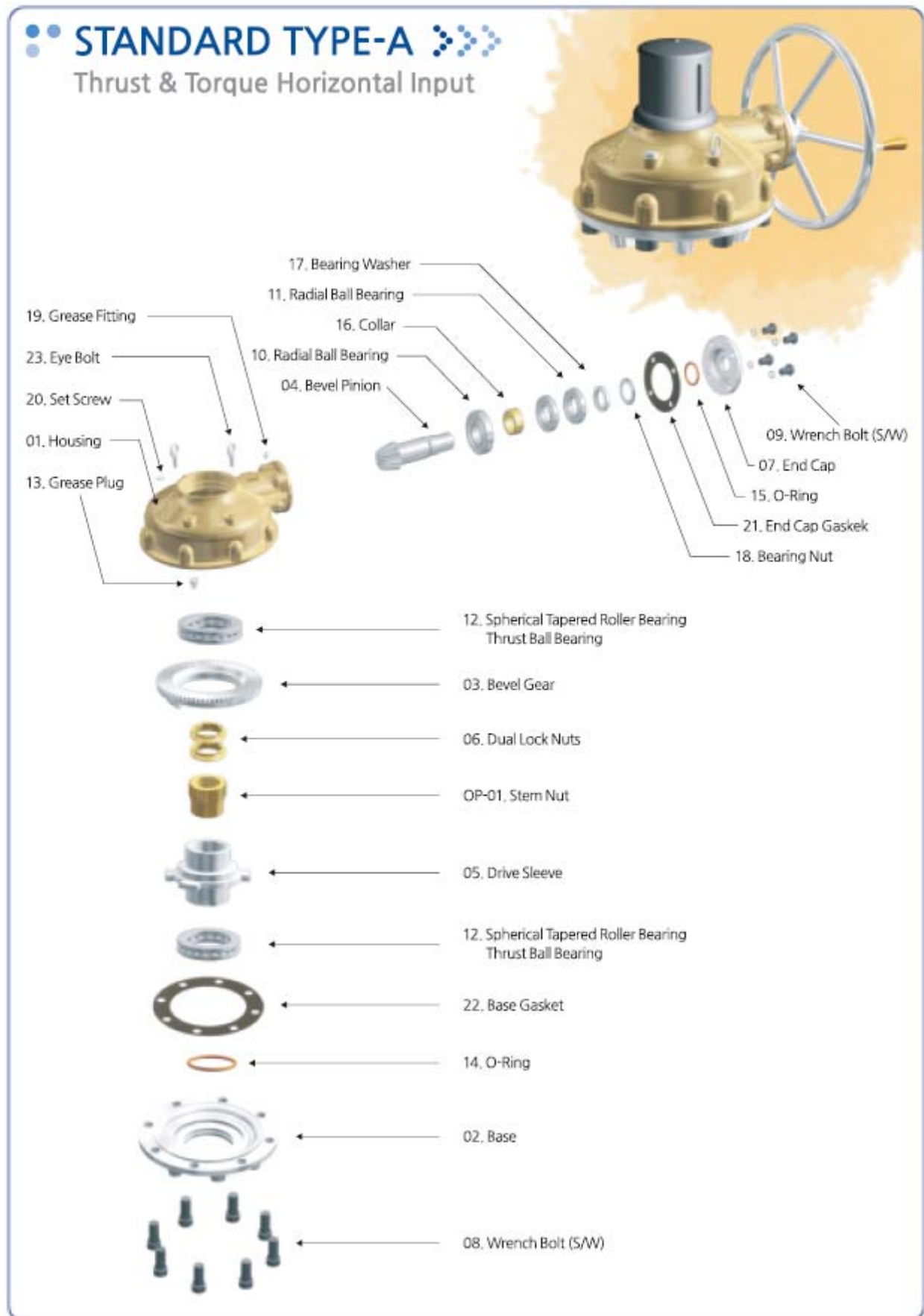




Bevel Gear Assembly



Bevel Gear Assembly

:: Part List & Material

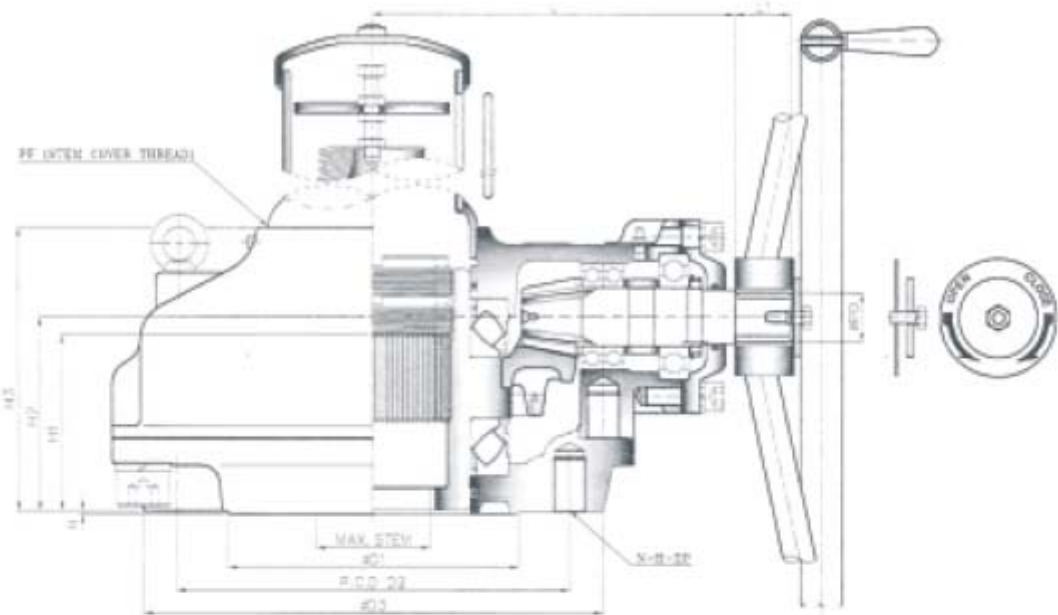
	NO.	DESCRIPTION	MATERIAL			REMARK
			NAME	JIS	ASTM	
STANDARD	01	Housing	Ductile Iron	FCD-450	A536-65-45-12	NOTE, 1
	02	Base	Ductile Iron	FCD-450	A536-65-45-12	NOTE, 1
	03	Bevel Gear	Carbon Steel	S45C	A576-1045	
	04	Bevel Pinion	Alloy Steel	SCM440	A322-4140	NOTE, 2
	05	Drive Sleeve	Ductile Iron	FCD-450	A536-65-45-12	NOTE, 1
	06	Dual Lock Nuts	Carbon Steel	S45C	A576-1045	
	07	End Cap	Ductile Iron	FCD-450	A536-65-45-12	NOTE, 1
	08	Wrench Bolt (S/W)	Alloy Steel	SCM440	A322-4140	
	09	Wrench Bolt (S/W)	Alloy Steel	SCM440	A322-4140	
	10	Radial Ball Bearing	Special Steel	SUJ2	A295-52100	
	11	Radial Ball Bearing	Special Steel	SUJ2	A295-52100	
	12	Thrust Ball Bearing	Special Steel	SUJ2	A295-52100	
	13	Grease Plug	Carbon Steel	S20C	A307 GR.B	
	14	O-Ring	Buna N	NBR		NOTE, 4
	15	O-Ring	Buna N	NBR		NOTE, 4
	16	Collar	Steel Pipe	STPG	A53	
	17	Bearing Washer	Carbon Steel	S45C	A576-1045	SNAP RING
	18	Bearing Nut	Carbon Steel	S45C	A576-1045	SNAP RING
	19	Grease Fitting	Carbon Steel	S20C + Zn	A307 GR.B + Zn	
	20	Set Screw	Stainless Steel	SUS340	A276-304	
	21	End Cap Gasket	Non-Asbestos			VALQUA 6500
	22	Base Gasket	Non-Asbestos			VALQUA 6500
	23	Eye Bolt	Carbon Steel	S20C + Zn	A307 GR.B + Zn	
OPTION	OP-01.	Stem Nut	Bronze	HBSC3	B584-C86200	NOTE, 3
	OP-02.	Hand Wheel	Steel Pipe	STPG	A53	
	OP-03.	Key	Carbon Steel	S45C	A576-1045	
	OP-04.	Name Plate	Aluminium			HANDLE PART NOTE, 5
	OP-05.	Washer	Carbon Steel	SS41	A283 GR.D	
	OP-06.	HEX. Bolt (S/W)	Alloy Steel	SUS304	A276-304	
	OP-07.	Stem Cover	Steel Pipe	STPG	A53	
	OP-08.	Indicate Bolt	Carbon Steel	S20C	A307 GR.B	
	OP-09.	HEX. Nut	Carbon Steel	S20C	A307 GR.B	
	OP-10.	Indicator	Plastic			STEM COVER NOTE, 6

:: Material Detail : Option and Material Changes

1. All castings are Ductile Iron, FCD-450 (ASTM Class 65-45-12)
2. In case of option for special request, it can be worked Nickel coating, high tensile stainless.
3. Also, the material can be changed as ALBC3(Aluminium Bronze), steel(A576-1045), A439 Gr D2C (Austenitic ductile iron casting), etc.
4. O-Ring Seal & Lubricant : Standard is Buna "N", temperature range -30°C to +120°C (-22°F to +248°F).
Standard lubricant is shall Alvania EP2, temperature Range -20°C to +120°C (-4°F to +248°F).
Other option are : High Temperature Viton O-Ring Grade V75, Temperature Range -25°C to +200°C (-4°F to +392°F)
Lubricant - shall Darina R2, Temperature Range -10°C to +200°C (-14°F to +392°F)
Low Temperature Viton O-Ring Grade V115, Temperature Range -35°C to +160°C (-31°F to +320°F)
Lubricant - shall S-6751, Temperature Range -40°C to +90°C (-40°F to +194°F)
5. SAMBO offers a wide variety of Handwheels, Chainwheels, Input Shaft, Locking Devices, etc.
6. SAMBO offers a wide variety of stem cover, stainless steel, polyacryl.
Paint : Unless specified, units are supplied with vp184 Red epoxy primer. SAMBO can provide finish coating upon request.

STANDARD TYPE-A

Thrust & Torque Horizontal Input



Dimension

UNIT : mm

DIM MODEL	TYPE	FLANGE SIZE	BASE PART					EXTERNAL PART				INPUT SHAFT PART			HAND WHEEL	STEM COVER
			ØD1	P.C.D		ØD3	H	H1	H2	H3	L	L1	ØPD	KEY		
SB-VS10	A	F-10	70	102	4-M10-17	125	3	56	71	95	121	34	26	8X7	250	PF 2"
SB-VS20		F-12	85	125	4-M12-20	150		63	78	106	131				300	PF 2 ½"
SB-V0		F-14	100	140	4-M16-25	175		72	81	122	154		32	10X8	400	PF 3"
SB-V1		F-16	130	165	4-M20-30	210		84	98	140	167				500	
SV-V2	B	(F-16) F-20	140	205	8-M16-30	250	3	95	115	162	188	34	32	10X8	630	PF 3 ½"
SB-V3		F-25	200	254	8-M16-32	300		102	119	167	209				710	PF 4"
SB-V35		F-30	230	298	8-M20-40	350		122	138	200	266				44	38
SB-V4		F-35	260	356	8-M30-45	415		133	150	215	291	900	PF 6"			
SB-V5		F-40	300	406	8-M36-55	475		164	175	251	334	PF 8"				
SB-V6		F-48	370	483	12-M36-55	560		182	201	284	375	58	50	16X10	1000	PF 8"
SB-V7	C	F-48	370	483	12-M36-55	560	3	208	122	316	409	58	50	16X10	1000	PF 8"
SB-V8		F-60	470	603	20-M36-55	700		234	258	360	471				PF 10"	
SB-V9	D	F-60	470	603	20-M36-55	700	3	296	333	445	555	58	50	16X10	1000	PF 10"



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
Unit 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.

Dial Indicator

A unique local position dial indicator is available. It is graduated in percent from 0% (close) to 100% (open).



M-O-V Option

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



Locking Device Option

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



Selection Chart for Manual Operation

SIZE MODEL	GEAR RATIO	MAX. STEM ACCEPTANCE		MAX. THRUST CAPACITY		MAX. TORQUE CAPACITY		WEIGHT
		TW	KEY	KN	lbf	N·m	Ft·lbf	Kg
SB-VS10	2.5:1	30	22 (8X7)	75.5	16970	220	162	8
SB-VS20	3:1	40	32 (10X8)	113	25400	370	273	11
SB-V0	3.25:1	46	38 (12X8)	127	28550	600	442	16
SB-V1	3.5:1	55	45 (14X9)	141	31700	980	723	22
SB-V2	4:1	62	52 (16X10)	190	42710	1500	1106	34
SB-V3	5:1	72	60 (18x11)	288	64750	2500	1844	45
SB-V35	5.5:1	85	72 (20x12)	350	78680	3500	2581	78
SB-V4	6:1	98	84 (22x14)	400	89920	5200	3835	103
SB-V5	6.5:1	115	100 (28x16)	510	114650	7800	5753	158
SB-V6	7:1	130	115 (32x18)	2310	519300	13000	9588	237
SB-V7	7.55:1	150	130 (36x20)	2500	562020	17600	12981	320
SB-V8	8:1	180	160 (40x22)	4100	921700	26000	19176	460
SB-V9	9:1	210	185 (45x25)	5450	1225180	42000	30927	736

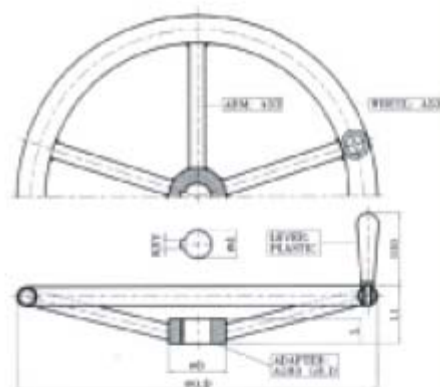
Handwheel Type

Bevel Standard Handwheel : Gate Valve

UNIT : mm

MODEL	SIZE	ØD	ØD	ØD & KEY	L	L1	ARM Q'TY
BH-250	250	60	60	Ø26 6X6	35	55	3EA
BH-300	300						
BH-400	400						
BH-500	500	70	70	Ø32 10X8	35	70	5EA
BH-630	630						
BH-710	710						
BH-800	800	80	80	Ø38 12X8	45	90	6EA
BH-900	900						
BH-1000	1000						

If there is no request from customers, we will make handwheel as per the above table.
As option, the material can be changed and Handwheel size can be suitable for all model.

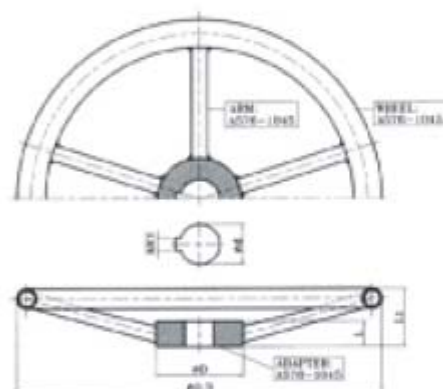


Round Bar Handwheel : Globe Valve

UNIT : mm

MODEL	SIZE	ØD	ØD	ØD & KEY	L	L1	ARM Q'TY
RH-250	250	80	80	Ø26 6X6	35	55	3EA
RH-300	300						
RH-400	400						
RH-500	500	100	100	Ø32 10X8	35	60	5EA
RH-630	630						
RH-710	710						
RH-800	800	120	120	Ø38 12X8	45	70	6EA
RH-900	900						
RH-1000	1000						

All material of round bar handwheel is made by carbon steel and it is used for required momentary impact to be suitable globe valve.



Drive Nut Handwheel

UNIT : mm

MODEL	SIZE	ØD	ØD	ØD & KEY	L	L1	ARM Q'TY
BDH-250	250	100	100	Ø26 6X6	35	55	3EA
BDH-300	300						
BDH-400	400						
BDH-500	500	100	100	Ø32 10X8	35	55	5EA
BDH-630	630						
BDH-710	710						
BDH-800	800	100	100	Ø38 12X8	45	70	6EA
BDH-900	900						
BDH-1000	1000						

This Handwheel is the type using air impact wrench and it can be made properly according to customer's request.

