Item No.	Valve Number (KKS)									Valve Description	Manufacturer / Country of Origin	Design Condition		Fluid Medium	Valve Type	Nominal Valve Size	Valve Rating	Body Material	End Connection	Valve Operation	Reference P&ID	Remarks
	Level 0 (Total Plant)	Level 1 (System Code)			Level 2 (Equipment Code)			Level 3 (Component Code)				Press	Temp									
	G	F_3	$F_1F_2F_3$	F_4	A_1A_2	A_3	A_4	B_1B_2	B_3			(barg)	(°C)	(-)	(See Item 2.6 of Instrn Sht)	(DN)	(LB)	(-)	(See Item 2.10 of Instrn Sht)	(See Item 2.11 of Instrn Sht)		
2311	0	0	GBK	10	AA	142	N/A	N/A	N/A	V-FILTER BACKWASH PUMP A INLET VALVE	BRAY/CHINA	1.0	30	SEAWATER	BUTTERFLY VALVE	300	PN10	CARBON STEEL WITH POLYESTER COATING	WAFER	MANUALLY BY HANDWHEEL	TJB56-L3-OFF-C-GCA-M-PID-0007	
2312	0	0	GBK	10	AA	143	N/A	N/A	N/A	V-FILTER BACKWASH PUMP A OUTLET CHECK VALVE	TIANJIN JINGTONG/CHINA	2.0	30	SEAWATER	CHECK VALVE	250	PN10	CARBON STEEL WITH RUBBER LINED	FLANGED	-	TJB56-L3-OFF-C-GCA-M-PID-0007	
2313	0	0	GBK	10	AA	144	N/A	N/A	N/A	V-FILTER BACKWASH PUMP A OUTLET VALVE	BRAY/CHINA	2.0	30	SEAWATER	BUTTERFLY VALVE	250	PN10	CARBON STEEL WITH POLYESTER COATING	WAFER	MANUALLY BY HANDWHEEL	TJB56-L3-OFF-C-GCA-M-PID-0007	
2314	0	0	GBK	10	AA	145	N/A	N/A	N/A	V-FILTER BACKWASH PUMP B INLET VALVE	BRAY/CHINA	1.0	30	SEAWATER	BUTTERFLY VALVE	300	PN10	CARBON STEEL WITH POLYESTER COATING	WAFER	MANUALLY BY HANDWHEEL	TJB56-L3-OFF-C-GCA-M-PID-0007	
2315	0	0	GBK	10	AA	146	N/A	N/A	N/A	V-FILTER BACKWASH PUMP B OUTLET CHECK VALVE	TIANJIN JINGTONG/CHINA	2.0	30	SEAWATER	CHECK VALVE	250	PN10	CARBON STEEL WITH RUBBER LINED	FLANGED	-	TJB56-L3-OFF-C-GCA-M-PID-0007	
2316	0	0	GBK	10	AA	147	N/A	N/A	N/A	V-FILTER BACKWASH PUMP B OUTLET VALVE	BRAY/CHINA	2.0	30	SEAWATER	BUTTERFLY VALVE	250	PN10	CARBON STEEL WITH POLYESTER COATING	WAFER	MANUALLY BY HANDWHEEL	TJB56-L3-OFF-C-GCA-M-PID-0007	
2317	0	0	GBK	10	AA	148	N/A	N/A	N/A	V-FILTER BACKWASH PUMP C INLET VALVE	BRAY/CHINA	1.0	30	SEAWATER	BUTTERFLY VALVE	300	PN10	CARBON STEEL WITH POLYESTER COATING	WAFER	MANUALLY BY HANDWHEEL	TJB56-L3-OFF-C-GCA-M-PID-0007	
2318	0	0	GBK	10	AA	149	N/A	N/A	N/A	V-FILTER BACKWASH PUMP C OUTLET CHECK VALVE	TIANJIN JINGTONG/CHINA	2.0	30	SEAWATER	CHECK VALVE	250	PN10	CARBON STEEL WITH RUBBER LINED	FLANGED	-	TJB56-L3-OFF-C-GCA-M-PID-0007	
2319	0	0	GBK	10	AA	150	N/A	N/A	N/A	V-FILTER BACKWASH PUMP C OUTLET VALVE	BRAY/CHINA	2.0	30	SEAWATER	BUTTERFLY VALVE	250	PN10	CARBON STEEL WITH POLYESTER COATING	WAFER	MANUALLY BY HANDWHEEL	TJB56-L3-OFF-C-GCA-M-PID-0007	
2320	0	0	GBK	10	AA	341	N/A	N/A	N/A	V-FILTER BACKWASH PUMP A OUTLET PI ROOT VALVE	CEPEX/CHINA	2.0	30	SEAWATER	BALL VALVE	15	PN10	UPVC	FLANGED	MANUALLY BY HANDLE	TJB56-L3-OFF-C-GCA-M-PID-0007	
2321	0	0	GBK	10	AA	342	N/A	N/A	N/A	V-FILTER BACKWASH PUMP B OUTLET PI ROOT VALVE	CEPEX/CHINA	2.0	30	SEAWATER	BALL VALVE	15	PN10	UPVC	FLANGED	MANUALLY BY HANDLE	TJB56-L3-OFF-C-GCA-M-PID-0007	
2322	0	0	GBK	10	AA	343	N/A	N/A	N/A	V-FILTER BACKWASH PUMP C OUTLET PI ROOT VALVE	CEPEX/CHINA	2.0	30	SEAWATER	BALL VALVE	15	PN10	UPVC	FLANGED	MANUALLY BY HANDLE	TJB56-L3-OFF-C-GCA-M-PID-0007	
2323	0	0	GBK	10	AA	344	N/A	N/A	N/A	V-FILTER BACKWASH PUMPS OUTLET MAIN PIPE PIT ROOT VALVE	CEPEX/CHINA	2.0	30	SEAWATER	BALL VALVE	15	PN10	UPVC	FLANGED	MANUALLY BY HANDLE	TJB56-L3-OFF-C-GCA-M-PID-0007	
2324	0	0	GBK	10	AA	351	N/A	N/A	N/A	V-FILTER BACKWASH PUMP A INLET PI ROOT VALVE	CEPEX/CHINA	2.0	30	SEAWATER	BALL VALVE	15	PN10	UPVC	FLANGED	MANUALLY BY HANDLE	TJB56-L3-OFF-C-GCA-M-PID-0007	
2325	0	0	GBK	10	AA	352	N/A	N/A	N/A	V-FILTER BACKWASH PUMP B INLET PI ROOT VALVE	CEPEX/CHINA	2.0	30	SEAWATER	BALL VALVE	15	PN10	UPVC	FLANGED	MANUALLY BY HANDLE	TJB56-L3-OFF-C-GCA-M-PID-0007	
2326	0	0	GBK	10	AA	353	N/A	N/A	N/A	V-FILTER BACKWASH PUMP C INLET PI ROOT VALVE	CEPEX/CHINA	2.0	30	SEAWATER	BALL VALVE	15	PN10	UPVC	FLANGED	MANUALLY BY HANDLE	TJB56-L3-OFF-C-GCA-M-PID-0007	
2327	0	0	GBK	10	AA	701	N/A	N/A	N/A	V-FILTER BACKWASH BLOWER A OUTLET SAFETY VALVE	CEPEX/CHINA	0.06	30	AIR	SAFETY VALVE	25	PN10	CARBON STEEL	FLANGED	-	TJB56-L3-OFF-C-GCA-M-PID-0007	
2328	0	0	GBK	10	AA	151	N/A	N/A	N/A	V-FILTER BACKWASH BLOWER A OUTLET CHECK VALVE	CEPEX/CHINA	0.06	30	AIR	CHECK VALVE	250	PN10	CARBON STEEL	FLANGED	-	TJB56-L3-OFF-C-GCA-M-PID-0007	
2329	0	0	GBK	10	AA	152	N/A	N/A	N/A	V-FILTER BACKWASH BLOWER A OUTLET VALVE	BRAY/CHINA	0.06	30	AIR	BUTTERFLY VALVE	250	PN10	CARBON STEEL WITH POLYESTER COATING	WAFER	MANUALLY BY HANDWHEEL	TJB56-L3-OFF-C-GCA-M-PID-0007	
2330	0	0	GBK	10	AA	702	N/A	N/A	N/A	V-FILTER BACKWASH BLOWER B OUTLET SAFETY VALVE	CEPEX/CHINA	0.06	30	AIR	SAFETY VALVE	25	PN10	CARBON STEEL	FLANGED	-	TJB56-L3-OFF-C-GCA-M-PID-0007	
2331	0	0	GBK	10	AA	153	N/A	N/A	N/A	V-FILTER BACKWASH BLOWER B OUTLET CHECK VALVE	CEPEX/CHINA	0.06	30	AIR	CHECK VALVE	250	PN10	CARBON STEEL	FLANGED	-	TJB56-L3-OFF-C-GCA-M-PID-0007	
2332	0	0	GBK	10	AA	154	N/A	N/A	N/A	V-FILTER BACKWASH BLOWER B OUTLET VALVE	BRAY/CHINA	0.06	30	AIR	BUTTERFLY VALVE	250	PN10	CARBON STEEL WITH POLYESTER COATING	WAFER	MANUALLY BY HANDWHEEL	TJB56-L3-OFF-C-GCA-M-PID-0007	
2333	0	0	GBK	10	AA	345	N/A	N/A	N/A	V-FILTER BACKWASH BLOWER A OUTLET PI ROOT VALVE	BRAY/CHINA	0.06	30	AIR	BALL VALVE	15	PN10	SS316	BUTT WELDED	MANUALLY BY HANDLE	TJB56-L3-OFF-C-GCA-M-PID-0007	
2334	0	0	GBK	10	AA	346	N/A	N/A	N/A	V-FILTER BACKWASH BLOWER B OUTLET PI ROOT VALVE	BRAY/CHINA	0.06	30	AIR	BALL VALVE	15	PN10	SS316	BUTT WELDED	MANUALLY BY HANDLE	TJB56-L3-OFF-C-GCA-M-PID-0007	
2335	0	0	GBK	10	AA	941	N/A	N/A	N/A	V-FILTER BACKWASH BLOWER OUTLET MAIN PIPE VENT VALVE	BRAY/CHINA	0.06	30	AIR	BUTTERFLY VALVE	50	PN10	CARBON STEEL WITH POLYESTER COATING	WAFER	AUTOMATIC BY ELECTRIC MOTOR ACTUATOR	TJB56-L3-OFF-C-GCA-M-PID-0007	
2336	0	0	GBK	20	AA	114	N/A	N/A	N/A	AUTO SELF CLEANING STRAINER A INLET VALVE	BRAY/CHINA	3.5	30	SEAWATER	BUTTERFLY VALVE	250	PN10	CARBON STEEL WITH POLYESTER COATING	WAFER	MANUALLY BY HANDWHEEL	TJB56-L3-OFF-C-GCA-M-PID-0008	
2337	0	0	GBK	20	AA	115	N/A	N/A	N/A	AUTO SELF CLEANING STRAINER A OUT VALVE	BRAY/CHINA	3.5	30	SEAWATER	BUTTERFLY VALVE	250	PN10	CARBON STEEL WITH POLYESTER COATING	WAFER	MANUALLY BY HANDWHEEL	TJB56-L3-OFF-C-GCA-M-PID-0008	
2338	0	0	GBK	20	AA	116	N/A	N/A	N/A	AUTO SELF CLEANING STRAINER A OUT CHECK VALVE	TIANJIN JINGTONG/CHINA	3.5	30	SEAWATER	CHECK VALVE	250	PN10	CARBON STEEL WITH RUBBER LINED	FLANGED	-	TJB56-L3-OFF-C-GCA-M-PID-0008	
2339	0	0	GBK	20	AA	117	N/A	N/A	N/A	AUTO SELF CLEANING STRAINER B INLET VALVE	BRAY/CHINA	3.5	30	SEAWATER	BUTTERFLY VALVE	250	PN10	CARBON STEEL WITH POLYESTER COATING	WAFER	MANUALLY BY HANDWHEEL	TJB56-L3-OFF-C-GCA-M-PID-0008	
2340	0	0	GBK	20	AA	118	N/A	N/A	N/A	AUTO SELF CLEANING STRAINER B OUT VALVE	BRAY/CHINA	3.5	30	SEAWATER	BUTTERFLY VALVE	250	PN10	CARBON STEEL WITH POLYESTER COATING	WAFER	MANUALLY BY HANDWHEEL	TJB56-L3-OFF-C-GCA-M-PID-0008	
2341	0	0	GBK	20	AA	119	N/A	N/A	N/A	AUTO SELF CLEANING STRAINER B OUT CHECK VALVE	TIANJIN JINGTONG/CHINA	3.5	30	SEAWATER	CHECK VALVE	250	PN10	CARBON STEEL WITH RUBBER LINED	FLANGED	-	TJB56-L3-OFF-C-GCA-M-PID-0008	
2342	0	0	GBK	20	AA	120	N/A	N/A	N/A	AUTO SELF CLEANING STRAINER C INLET VALVE	BRAY/CHINA	3.5	30	SEAWATER	BUTTERFLY VALVE	250	PN10	CARBON STEEL WITH POLYESTER COATING	WAFER	MANUALLY BY HANDWHEEL	TJB56-L3-OFF-C-GCA-M-PID-0008	
2343	0	0	GBK	20	AA	121	N/A	N/A	N/A	AUTO SELF CLEANING STRAINER C OUT VALVE	BRAY/CHINA	3.5	30	SEAWATER	BUTTERFLY VALVE	250	PN10	CARBON STEEL WITH POLYESTER COATING	WAFER	MANUALLY BY HANDWHEEL	TJB56-L3-OFF-C-GCA-M-PID-0008	
2344	0	0	GBK	20	AA	122	N/A	N/A	N/A	AUTO SELF CLEANING STRAINER C OUT CHECK VALVE	TIANJIN JINGTONG/CHINA	3.5	30	SEAWATER	CHECK VALVE	250	PN10	CARBON STEEL WITH RUBBER LINED	FLANGED	-	TJB56-L3-OFF-C-GCA-M-PID-0008	
2345	0	0	GBK	20	AA	123	N/A	N/A	N/A	AUTO SELF CLEANING STRAINER D INLET VALVE	BRAY/CHINA	3.5	30	SEAWATER	BUTTERFLY VALVE	250	PN10	CARBON STEEL WITH POLYESTER COATING	WAFER	MANUALLY BY HANDWHEEL	TJB56-L3-OFF-C-GCA-M-PID-0008	
2346	0	0	GBK	20	AA	124	N/A	N/A	N/A	AUTO SELF CLEANING STRAINER D OUT VALVE	BRAY/CHINA	3.5	30	SEAWATER	BUTTERFLY VALVE	250	PN10	CARBON STEEL WITH POLYESTER COATING	WAFER	MANUALLY BY HANDWHEEL	TJB56-L3-OFF-C-GCA-M-PID-0008	
2347	0	0	GBK	20	AA	125	N/A	N/A	N/A	AUTO SELF CLEANING STRAINER D OUT CHECK VALVE	TIANJIN JINGTONG/CHINA	3.5	30	SEAWATER	CHECK VALVE	250	PN10	CARBON STEEL WITH RUBBER LINED	FLANGED	-	TJB56-L3-OFF-C-GCA-M-PID-0008	
2348	0	0	GBK	20	AA	126	N/A	N/A	N/A	AUTO SELF CLEANING STRAINERS BYPASS VALVE	BRAY/CHINA	3.5	30	SEAWATER	BUTTERFLY VALVE	250	PN10	CARBON STEEL WITH POLYESTER COATING	WAFER	MANUALLY BY HANDWHEEL	TJB56-L3-OFF-C-GCA-M-PID-0008	
2349	0	0	GBK	20	AA	306	N/A	N/A	N/A	AUTO SELF CLEANING STRAINER A INLET PI ROOT VALVE	AMIAD/CHINA	3.5	30	SEAWATER	BALL VALVE	15	PN10	DUPLEX SS	THREADED	MANUALLY BY HANDLE	TJB56-L3-OFF-C-GCA-M-PID-0008	
2350	0	0	GBK	20	AA	307	N/A	N/A	N/A	AUTO SELF CLEANING STRAINER A OUTLET PI ROOT VALVE	AMIAD/CHINA	3.5	30	SEAWATER	BALL VALVE	15	PN10	DUPLEX SS	THREADED	MANUALLY BY HANDLE	TJB56-L3-OFF-C-GCA-M-PID-0008	
2351	0	0	GBK	20	AA	308	N/A	N/A	N/A	AUTO SELF CLEANING STRAINER B INLET PI ROOT VALVE	AMIAD/CHINA	3.5	30	SEAWATER	BALL VALVE	15	PN10	DUPLEX SS	THREADED	MANUALLY BY HANDLE	TJB56-L3-OFF-C-GCA-M-PID-0008	
2352	0	0	GBK	20	AA	309	N/A	N/A	N/A	AUTO SELF CLEANING STRAINER B OUTLET PI ROOT VALVE	AMIAD/CHINA	3.5	30	SEAWATER	BALL VALVE	15	PN10	DUPLEX SS	THREADED	MANUALLY BY HANDLE	TJB56-L3-OFF-C-GCA-M-PID-0008	