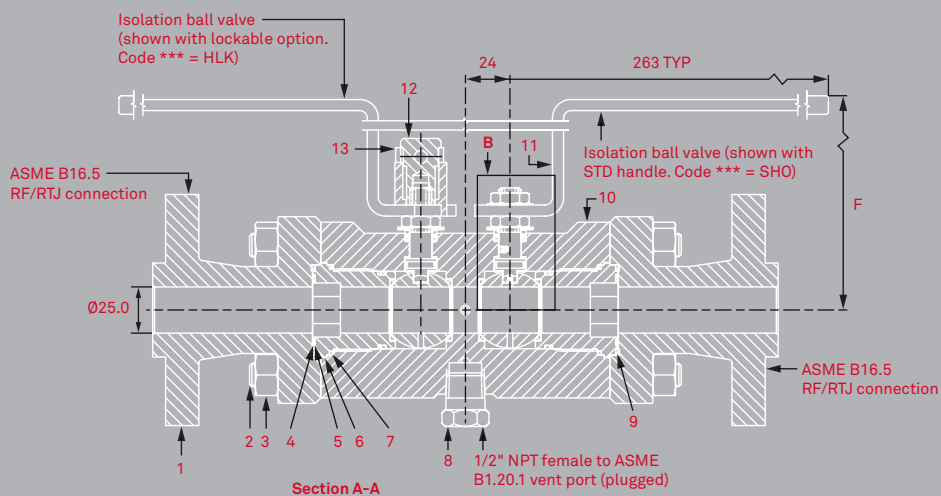
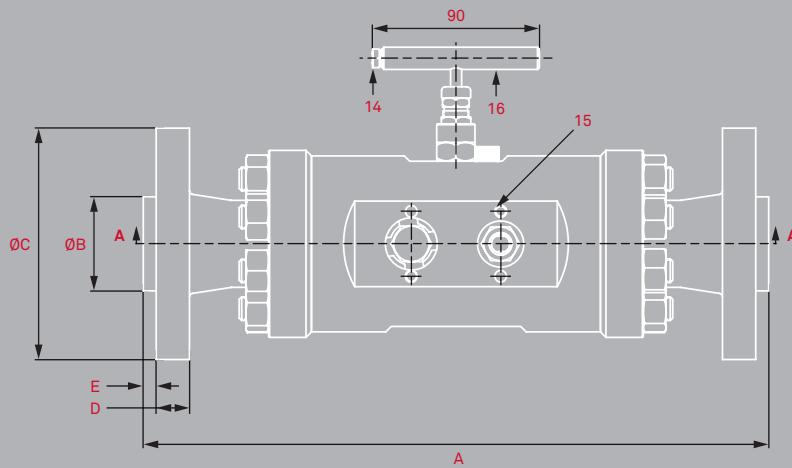
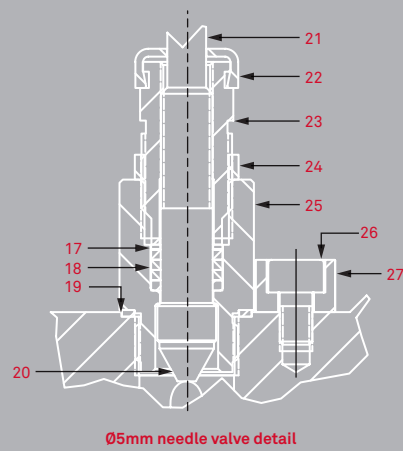
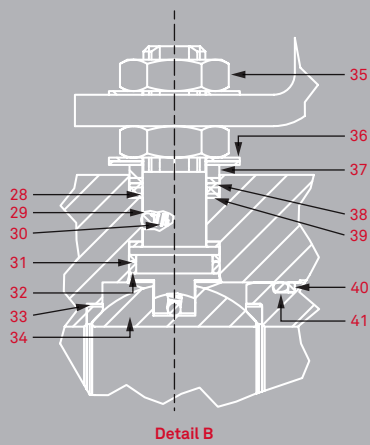
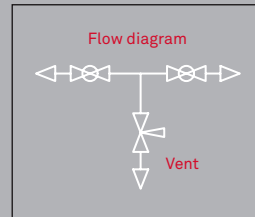
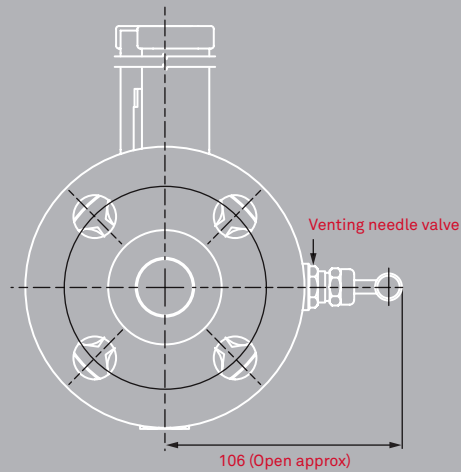


XC Ø19 & Ø25 DBB Valve Manifold

Qualifications

- Fire safe to ISO 10497
- Fugitive emission tight ball valve design
- Class A tight to the CO2 level between -29°C > 40°C at pressure of 431 bar (6250 psi) and below
- Class B tight to the CO1 level between -46°C > 100°C at pressure of 431 bar (6250 psi) and below
- API 6A PR2 qualified ball valve design at class 2500
- Endurance tested to 1200 operational cycles at class 2500 in accordance with API 6A criteria
- Type Approval Tested in accordance with SPE 77-300 at class 2500 + class 600 between +150°C and -29°C





Components Key

Item No.	Description	Material	Quantity	Item No.	Description	Material	Quantity
1	BOLT ON FLANGE	#	2	22	DUST CAP	PVC	1
2	STUD	*	12 - 16	23	GLAND ADJUSTER	UNS S31600	1
3	HEX NUT	*	12 - 16	24	GLAND LOCKNUT	UNS S31600	1
4	O-RING	ENDURA V91A	2	25	BONNET HOUSING	‡	1
5	BACK-UP RING	PEEK	2	26	SHC SCREW	A4 ST/ST	1
6	BODY INSERT	A479 UNS S31803	2	27	LOCKING CAM	UNS S31600	1
7	BODY SEAL	GRAPHITE	2	28	STEM	A479 UNS S31803	2
8	1/2" N.PT BLANK PLUG	†	1	29	2.5mm BALL	B446 UNS N06625	4
9	BODY SEAL	GRAPHITE	2	30	ANTI-STATIC SPRING	INCONEL X750	4
10	BODY	#	1	31	BACK-UP RING	PEEK	2
11	VALVE HANDLE (2)	UNS S31600	2	32	O-RING	ENDURA V91A	2
12	LOCKING PIN	UNS S31600	1	33	SEAT	PEEK	4
13	LOCKING COLLAR	UNS S31600	1	34	BALL	B446 UNS N06625	2
14	HEX CAP SCREW	A4 ST/ST	1	35	HEX NUT	A4 ST/ST	3
15	STOP PIN	UNS S31600	2	36	BELLEVILLE WASHER	ST/ST	5
16	EXTENDED "T" HANDLE	UNS S31600	1	37	SPACER	UNS S31600	2
17	PACKING WASHER	RTFE	2	38	ANTI-EXTRUSION RING	PEEK	4
18	GLAND PACKING	GRAPHITE	3	39	GLAND PACKING	GRAPHITE	4
19	BONNET SEAL	UNS S31600	1	40	BACK-UP RING	PEEK	2
20	NEEDLE VALVE TIP	A479 UNS S31803	1	41	O-RING	ENDURA V91A	2
21	NEEDLE STEM	A479 UNS S31803	1				

= BODY/FLANGE MATERIAL (S=F316, L=LF2, U=F51)
 * = BOLTING MATERIAL (S & U =B8M/8MA L =L7M/7M)

† = 1/2" VENT PLUG MATERIAL (S & L =A479 UNS S31600, U=A479 UNS S31803)
 ‡ = BONNET HOUSING MATERIAL (S & L =A479 UNS S31600, U=A479 UNS S31803)

ALCO XC Ø19mm Bore

TABLE 1
RF/RTJ Flange x Flange/NPT

Flange size (in)	Class rating	Part No.	A - RF	A - RTJ	A 3/4" NPT - RF	A 3/4" NPT - RTJ	ØB - RF	ØB - RTJ	ØC	D	E - RF	E - RTJ	F	Nominal Mass (kg)
3/4"	150	XC-19#-06AR‡06AR‡-B*-***	291	N/A	293	N/A	42.9	N/A	100	11.7	2.0	N/A	97	10
3/4"	300	XC-19#-06BR‡06BR‡-B*-***	305	315	300	305	42.9	63.6	115	14.8	2.0	6.4	97	11
3/4"	600	XC-19#-06CR‡06CR‡-B*-***	319	317	307	306	42.9	63.6	115	16.4	7.0	6.4	97	12
3/4"	900/1500	XC-19#-06ER‡06ER‡-B*-***	347	345	321	320	42.9	66.6	130	25.9	7.0	6.4	132	14
3/4"	2500	XC-19#-06FR‡06FR‡-B*-***	349	349	322	322	42.9	73.1	140	32.3	7.0	6.4	132	16
1"	150	XC-19#-08AR‡08AR‡-B*-***	295	303	295	299	50.8	63.6	110	13.2	2.0	6.4	97	11
1"	300	XC-19#-08BR‡08BR‡-B*-***	309	317	302	306	50.8	70.1	125	16.4	2.0	6.4	132	12
1"	600	XC-19#-08CR‡08CR‡-B*-***	321	321	308	308	50.8	70.1	125	18.0	7.0	6.4	132	13
1"	900/1500	XC-19#-08ER‡08ER‡-B*-***	355	353	325	324	50.8	71.6	150	29.1	7.0	6.4	132	17
1"	2500	XC-19#-08FR‡08FR‡-B*-***	357	357	326	326	50.8	82.6	160	35.5	7.0	6.4	132	20
1 1/2"	150	XC-19#-12AR‡12AR‡-B*-***	291	299	293	297	73.0	82.6	125	16.4	2.0	6.4	132	12
1 1/2"	300	XC-19#-12BR‡12BR‡-B*-***	309	317	302	306	73.0	90.6	155	19.6	2.0	6.4	132	15
1 1/2"	600	XC-19#-12CR‡12CR‡-B*-***	319	319	307	307	73.0	90.6	155	22.8	7.0	6.4	132	16
1 1/2"	900/1500	XC-19#-12ER‡12ER‡-B*-***	351	351	323	323	73.0	92.1	180	32.3	7.0	6.4	132	22
1 1/2"	2500	XC-19#-12FR‡12FR‡-B*-***	369	371	332	333	73.0	114.1	205	45.0	7.0	7.9	167	31
2"	150	XC-19#-16AR‡16AR‡-B*-***	287	297	291	296	92.1	102.1	150	18.0	2.0	6.4	132	14
2"	300	XC-19#-16BR‡16BR‡-B*-***	295	307	295	301	92.1	108.1	165	21.2	2.0	7.9	132	16
2"	600	XC-19#-16CR‡16CR‡-B*-***	315	317	305	306	92.1	108.1	165	25.9	7.0	7.9	132	18
2"	900/1500	XC-19#-16ER‡16ER‡-B*-***	345	347	320	321	92.1	124.1	215	38.6	7.0	7.9	167	29
2"	2500	XC-19#-16FR‡16FR‡-B*-***	363	365	329	330	92.1	133.1	235	51.4	7.0	7.9	167	41

Configuration Metric / mm

= BODY/FLANGE MATERIAL (S=F316, L=LF2, U=F51)
* = BOLTING MATERIAL (2FC=L7M, 8ST=B8M)

‡ = FLANGE TYPE (F=RF, J=RTJ)
*** = HANDLE OPTIONS (SHO=STANDARD, HLK=HANDLE LOCKABLE)

TABLE 2

Flange x NPT	NPT CONFIGURATIONS
XC-19#-06AR‡##02-B*-***	*PLEASE NOTE: PART CODES VARY
XC-19#-06BR‡##02-B*-***	DEPENDING ON THE CONFIGURATION OF THE VALVE. AS SHOWN TO THE LEFT.

= NPT SIZE (04= 1/2", 06=3/4", 08=1", 10= 1 1/4")

TABLE 3

Size	RF	RTJ
1/4"	-21	-21
1"	+10	+10
1 1/4"	+19	+19

IN ORDER TO OBTAIN OVERALL LENGTH VALUES (A) FOR 1" AND 1 1/4" NPT CONNECTIONS, THE VALUES IN **TABLE 3** NEED TO BE ADDED OR SUBTRACTED FROM THE OVERALL LENGTH (A). FOR EXAMPLE, TO CALCULATE THE OVERALL LENGTH FOR AN **RF FLANGE x 1" FEMALE NPT** WE ADD 10 TO THE 3/4" NPT - RF VALUES IN **TABLE 1**.

ALCO XC Ø25mm Bore

TABLE 1
RF/RTJ Flange x Flange/NPT

Flange size (in)	Class rating	Part No.	A - RF	A - RTJ	A 1" NPT - RF	A 1" NPT - RTJ	ØB - RF	ØB - RTJ	ØC	D	E - RF	E - RTJ	F	Nominal Mass (kg)
1"	150	XC-25#-08AR‡08AR‡-B*-***	310	320	316	321	50.8	63.6	110	13.2	2.0	6.4	97	14
1"	300	XC-25#-08BR‡08BR‡-B*-***	326	334	324	328	50.8	70.1	125	16.4	2.0	6.4	147	16
1"	600	XC-25#-08CR‡08CR‡-B*-***	338	338	330	330	50.8	70.1	125	18.0	7.0	6.4	147	16
1"	900/1500	XC-25#-08ER‡08ER‡-B*-***	370	370	345	346	50.8	71.6	150	29.1	7.0	6.4	147	20
1"	2500	XC-25#-08FR‡08FR‡-B*-***	382	380	352	351	50.8	82.6	160	35.5	7.0	6.4	147	23
1 1/2"	150	XC-25#-12AR‡12AR‡-B*-***	318	326	320	324	73.0	82.6	125	16.4	2.0	6.4	147	16
1 1/2"	300	XC-25#-12BR‡12BR‡-B*-***	326	334	324	328	73.0	90.6	155	19.6	2.0	6.4	147	18
1 1/2"	600	XC-25#-12CR‡12CR‡-B*-***	340	340	331	331	73.0	90.6	155	22.8	7.0	6.4	147	20
1 1/2"	900/1500	XC-25#-12ER‡12ER‡-B*-***	372	370	347	346	73.0	92.1	180	32.3	7.0	6.4	147	25
1 1/2"	2500	XC-25#-12FR‡12FR‡-B*-***	394	396	358	359	73.0	114.1	205	45.0	7.0	7.9	147	34
2"	150	XC-25#-16AR‡16AR‡-B*-***	314	322	326	330	92.1	102.1	150	18.0	2.0	6.4	147	17
2"	300	XC-25#-16BR‡16BR‡-B*-***	320	332	321	335	92.1	108.1	165	21.2	2.0	7.9	147	19
2"	600	XC-25#-16CR‡16CR‡-B*-***	340	342	339	340	92.1	108.1	165	25.9	7.0	7.9	147	21
2"	900/1500	XC-25#-16ER‡16ER‡-B*-***	368	370	353	354	92.1	124.1	215	38.6	7.0	7.9	147	33
2"	2500	XC-25#-16FR‡16FR‡-B*-***	394	396	366	367	92.1	133.1	235	51.4	7.0	7.9	197	44

Configuration Metric / mm

= BODY/FLANGE MATERIAL (S=F316, L=LF2, U=F51)
* = BOLTING MATERIAL (2FC=L7M, 8ST=B8M)

‡ = FLANGE TYPE (F=RF, J=RTJ)
*** = HANDLE OPTIONS (SHO=STANDARD, HLK=HANDLE LOCKABLE)

TABLE 2

Flange x NPT	NPT CONFIGURATIONS
XC-25#-08AR‡##02-B*-***	*PLEASE NOTE: PART CODES VARY
XC-25#-08BR‡##02-B*-***	DEPENDING ON THE CONFIGURATION OF THE VALVE. AS SHOWN TO THE LEFT.

= NPT SIZE (06=3/4", 08=1", 10=1 1/4", 12=1 1/2")

TABLE 3

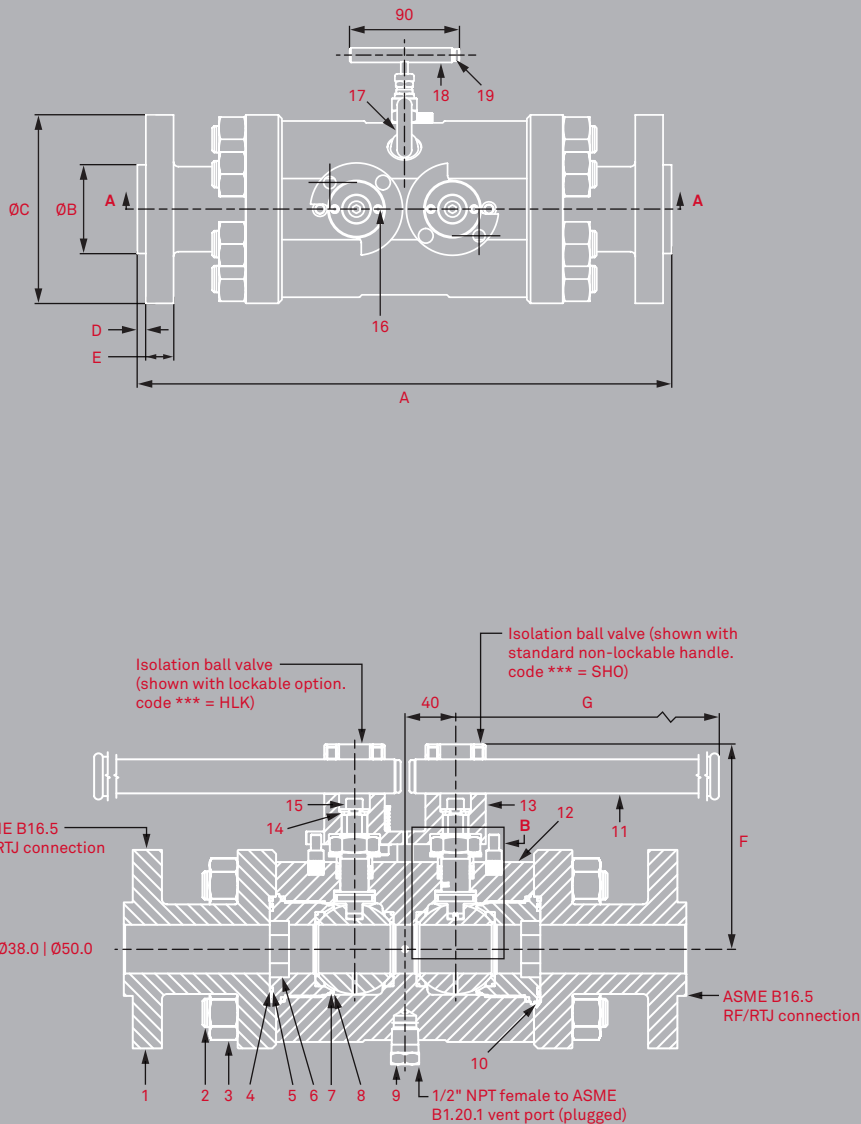
Size	RF	RTJ
3/4"	-39	-39
1 1/4"	+8	+8
1 1/2"	+18	+18

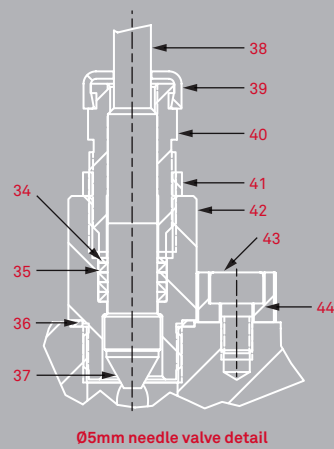
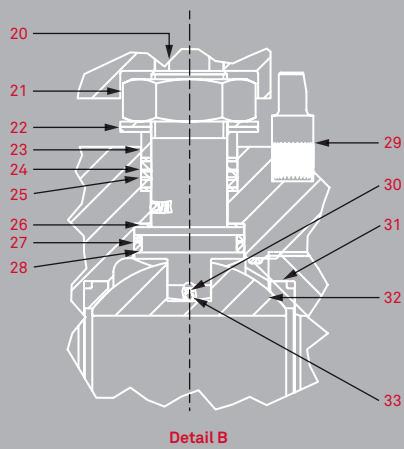
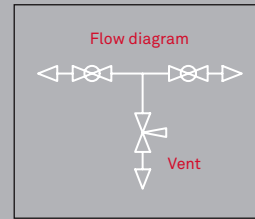
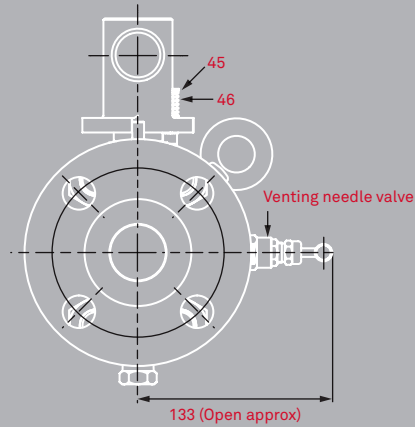
IN ORDER TO OBTAIN OVERALL LENGTH VALUES (A) FOR 1 1/4" AND 1 1/2" NPT CONNECTIONS, THE VALUES IN **TABLE 3** NEED TO BE ADDED OR SUBTRACTED FROM THE OVERALL LENGTH (A). FOR EXAMPLE, TO CALCULATE THE OVERALL LENGTH FOR AN **RF FLANGE x 1 1/4" FEMALE NPT** WE ADD 8 TO THE 1" NPT - RF VALUES IN **TABLE 1**.

XC Ø38 & Ø50 DBB Valve Manifold

Qualifications

- Fire safe to ISO 10497
- Fugitive emission tight ball valve design
- Class A tight to the CO2 level between -29°C > 40°C at pressure of 431 bar (6250 psi) and below
- Class B tight to the CO1 level between -46°C > 100°C at pressure of 431 bar (6250 psi) and below
- API 6A PR2 qualified ball valve design at class 2500
- Endurance tested to 1200 operational cycles at class 2500 in accordance with API 6A criteria
- Type Approval Tested in accordance with SPE 77-300 at class 2500 + class 600 between +150°C and -29°C





Components Key

Item No.	Description	Material	Quantity
1	BOLT ON FLANGE	#	2
2	STUD	*	12 - 16
3	NUT	*	12 - 16
4	O-RING	ENDURA V91A	2
5	BACK-UP RING	PEEK	2
6	SEAT RETAINER	A479 UNS S31803	2
7	BACK-UP RING	PEEK	2
8	O-RING	ENDURA V91A	2
9	1/2" N.PT BLANK PLUG	†	1
10	BODY SEAL	GRAPHITE	4
11	TB2 HANDLE	UNS S31600	2
12	VALVE BODY	#	1
13	HANDLE BOSS	UNS S31600	2
14	HANDLE WASHER	UNS S31600	2
15	SHC SCREW	A4 ST/ST	2
16	SET SCREW	A4 ST/ST	4
17	LIFTING EYE	A4 ST/ST	1
18	EXTENDED "T" HANDLE	UNS S31600	1
19	HEX CAP SCREW	A4 ST/ST	1
20	STEM	A479 UNS S31803	2
21	HEX NUT	A4 ST/ST	2
22	BELLEVILLE WASHER	ST/ST	4
23	SPACER	A4 ST/ST	2

Item No.	Description	Material	Quantity
24	ANTI-EXTRUSION RING	PEEK	4
25	STEM SEAL	GRAPHITE	6
26	THRUST WASHER	PEEK	2
27	BACK-UP RING	PEEK	2
28	O-RING	ENDURA V91A	2
29	STOP PIN	UNS S31600	2
30	ANTI-STATIC SPRING	INCONEL X750	4
31	SEAT	PEEK	4
32	BALL	A479 UNS S31803	2
33	2.5mm BALL	B446 UNS N06625	4
34	PACKING WASHER	RTFE	2
35	GLAND PACKING	GRAPHITE	3
36	BONNET SEAL	UNS S31600	1
37	NEEDLE VALVE TIP	A479 UNS S31803	1
38	NEEDLE STEM	A479 UNS S31803	1
39	DUST CAP	PVC	1
40	GLAND ADJUSTER	UNS S31600	1
41	GLAND LOCKNUT	UNS S31600	1
42	BONNET HOUSING	‡	1
43	SHC SCREW	A4 ST/ST	1
44	LOCKING CAM	UNS S31600	1
45	LOCKING PIN	UNS S31600	2
46	LOCKING PIN SPRING	UNS S31600	2

= BODY/FLANGE MATERIAL (S=F316, L=LF2, U=F51)
 * = BOLTING MATERIAL (S & U = B8M/8MA L = L7M/7M)

† = 1/2" VENT PLUG MATERIAL (S & L = A479 UNS S31600, U = A479 UNS S31803)
 ‡ = BONNET HOUSING MATERIAL (S & L = A479 UNS S31600, U = A479 UNS S31803)

ALCO XC Ø38mm Bore

TABLE 1
RF/RTJ Flange x Flange/NPT

Flange size (in)	Class rating	Part No.	A - RF	A - RTJ	A 1 1/2" NPT - RF	A 1 1/2" NPT - RTJ	ØB - RF	ØB - RTJ	ØC	D	E - RF	E - RTJ	F	G	Nominal Mass (kg)
1 1/2"	150	XC-38#-12AR‡12AR‡-B*-***	402	410	417	421	73.0	82.6	125	16.4	2.0	6.4	160	300	43
1 1/2"	300	XC-38#-12BR‡12BR‡-B*-***	424	434	428	433	73.0	90.6	155	19.6	2.0	6.4	160	300	46
1 1/2"	600	XC-38#-12CR‡12CR‡-B*-***	440	440	436	436	73.0	90.6	155	22.8	7.0	6.4	160	300	47
1 1/2"	900/1500	XC-38#-12ER‡12ER‡-B*-***	476	474	454	453	73.0	92.1	180	32.3	7.0	6.4	190	500	53
1 1/2"	2500	XC-38#-12FR‡12FR‡-B*-***	510	512	471	472	73.0	114.1	205	45.0	7.0	6.4	190	500	64
2"	150	XC-38#-16AR‡16AR‡-B*-***	418	426	425	429	92.1	102.1	150	18.0	2.0	6.4	160	300	45
2"	300	XC-38#-16BR‡16BR‡-B*-***	424	436	428	434	92.1	108.1	165	21.2	2.0	7.9	160	300	47
2"	600	XC-38#-16CR‡16CR‡-B*-***	444	446	438	439	92.1	108.1	165	25.9	7.0	7.9	160	300	49
2"	900/1500	XC-38#-16ER‡16ER‡-B*-***	472	472	452	452	92.1	124.1	215	38.6	7.0	7.9	190	500	62
2"	2500	XC-38#-16FR‡16FR‡-B*-***	502	504	467	468	92.1	133.1	235	51.4	7.0	7.9	230	500	74
3"	150	XC-38#-24AR‡24AR‡-B*-***	428	436	430	434	127.0	133.1	190	22.8	2.0	6.4	190	300	52
3"	300	XC-38#-24BR‡24BR‡-B*-***	438	450	435	441	127.0	146.1	210	27.5	2.0	7.9	190	300	56
3"	600	XC-38#-24CR‡24CR‡-B*-***	458	460	445	446	127.0	146.1	210	32.3	7.0	7.9	190	300	59
3"	900	XC-38#-24DR‡24DR‡-B*-***	470	472	451	452	127.0	156.1	240	38.6	7.0	7.9	230	500	69
3"	1500	XC-38#-24ER‡24ER‡-B*-***	490	492	461	462	127.0	168.1	265	48.2	7.0	7.9	230	500	82
3"	2500	XC-38#-24FR‡24FR‡-B*-***	534	538	483	485	127.0	168.1	305	67.2	7.0	9.5	230	500	114

Configuration Metric / mm

= BODY/FLANGE MATERIAL (S=F316, L=LF2, U=F51)
* = BOLTING MATERIAL (2FC=L7M, 8ST=B8M)

‡ = FLANGE TYPE (F=RF, J=RTJ)
*** = HANDLE OPTIONS (SHO=STANDARD, HLK=HANDLE LOCKABLE)

TABLE 2

Flange x NPT	NPT CONFIGURATIONS
XC-38#-12AR‡##02-B*-***	*PLEASE NOTE: PART CODES VARY
XC-38#-12BR‡##02-B*-***	DEPENDING ON THE CONFIGURATION OF THE VALVE. AS SHOWN TO THE LEFT.

= NPT SIZE (08=1", 10=1 1/4", 12=1 1/2", 16=2")

TABLE 3

Size	RF	RTJ
1"	-53	-53
1 1/4"	-53	-53
2"	+15	+15

IN ORDER TO OBTAIN OVERALL LENGTH VALUES (A) FOR 2" NPT CONNECTIONS, THE VALUES IN **TABLE 3** NEED TO BE ADDED OR SUBTRACTED FROM THE OVERALL LENGTH (A). FOR EXAMPLE, TO CALCULATE THE OVERALL LENGTH FOR AN **RF FLANGE x 2" FEMALE NPT** WE ADD 15MM TO THE 1 1/2" NPT - RF VALUES IN **TABLE 1**.

ALCO XC Ø50mm Bore

TABLE 1

RF/RTJ Flange x Flange/NPT

Flange size (in)	Class rating	Part No.	A - RF	A - RTJ	A 2" NPT - RF	A 2" NPT - RTJ	ØB - RF	ØB - RTJ	ØC	D	E - RF	E - RTJ	F	G	Nominal Mass (kg)
2"	150	XC-50#-16AR‡16AR‡-B*-***	459	467	475	479	92.1	102.1	150	18.0	2.0	6.4	170	300	63
2"	300	XC-50#-16BR‡16BR‡-B*-***	471	483	481	487	92.1	108.1	165	21.2	2.0	7.9	170	300	65
2"	600	XC-50#-16CR‡16CR‡-B*-***	491	493	491	492	92.1	108.1	165	25.9	7.0	7.9	170	300	66
2"	900/1500	XC-50#-16ER‡16ER‡-B*-***	533	535	512	513	92.1	124.1	215	38.6	7.0	7.9	200	500	80
2"	2500	XC-50#-16FR‡16FR‡-B*-***	565	567	528	529	92.1	133.1	235	51.4	7.0	7.9	200	500	91
3"	150	XC-50#-24AR‡24AR‡-B*-***	477	485	484	488	127.0	133.1	190	22.8	2.0	6.4	170	300	69
3"	300	XC-50#-24BR‡24BR‡-B*-***	493	505	492	498	127.0	146.1	210	27.5	2.0	7.9	200	300	74
3"	600	XC-50#-24CR‡24CR‡-B*-***	513	515	502	503	127.0	146.1	210	32.3	7.0	7.9	200	300	77
3"	900	XC-50#-24DR‡24DR‡-B*-***	533	535	512	513	127.0	156.1	240	38.6	7.0	7.9	200	500	87
3"	1500	XC-50#-16ER‡16ER‡-B*-***	559	561	525	526	127.0	168.1	265	48.2	7.0	7.9	240	500	101
3"	2500	XC-50#-16FR‡16FR‡-B*-***	601	607	546	549	127.0	168.1	305	67.2	7.0	9.5	240	500	133
4"	150	XC-50#-32AR‡32AR‡-B*-***	477	487	484	489	157.2	171.1	230	22.8	2.0	6.4	200	300	75
4"	300	XC-50#-32BR‡32BR‡-B*-***	499	511	495	501	157.2	175.1	255	30.7	2.0	7.9	200	300	85
4"	600	XC-50#-32CR‡32CR‡-B*-***	525	527	508	509	157.2	175.1	275	38.6	7.0	7.9	240	300	97
4"	900	XC-50#-32DR‡32DR‡-B*-***	545	547	518	519	157.2	181.1	290	45.0	7.0	7.9	240	500	107
4"	1500	XC-50#-32ER‡32ER‡-B*-***	573	575	532	533	157.2	194.1	310	54.5	7.0	7.9	240	500	124
4"	2500	XC-50#-32FR‡32FR‡-B*-***	621	629	556	560	157.2	203.1	355	76.7	7.0	11.1	240	500	172

Configuration Metric / mm

= BODY/FLANGE MATERIAL (S=F316, L=LF2, U=F51)

* = BOLTING MATERIAL (2FC=L7M, 8ST=B8M)

‡ = FLANGE TYPE (F=RF, J=RTJ)

*** = HANDLE OPTIONS (SHO=STANDARD, HLK=HANDLE LOCKABLE)

TABLE 2

Flange x NPT

XC-50#-16AR‡##02-B*-***
XC-50#-16BR‡##02-B*-***

NPT CONFIGURATIONS

*PLEASE NOTE: PART CODES VARY
DEPENDING ON THE CONFIGURATION
OF THE VALVE. AS SHOWN TO THE LEFT.

= NPT SIZE (10=1 1/4", 12=1 1/2", 16=2", 20=2 1/2")

TABLE 3

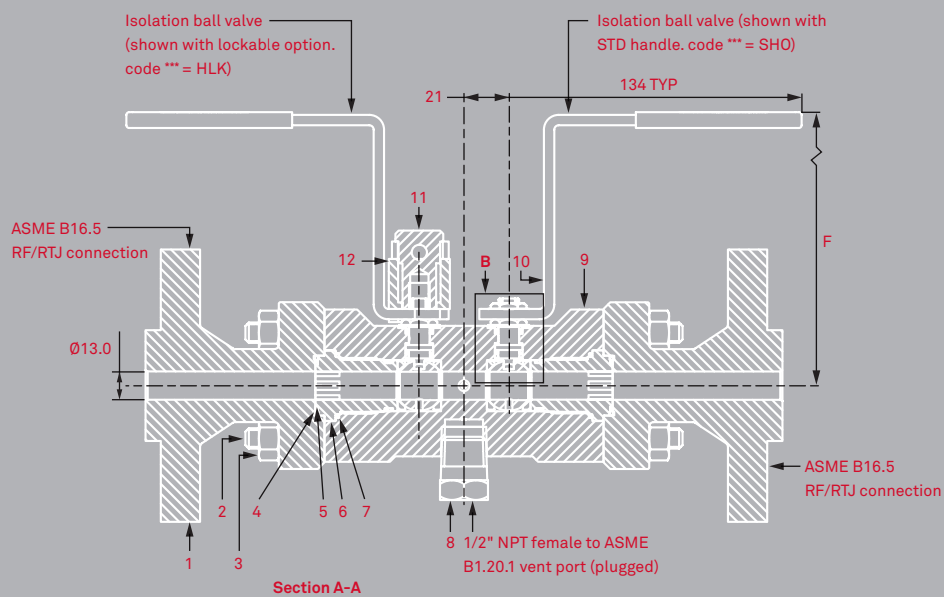
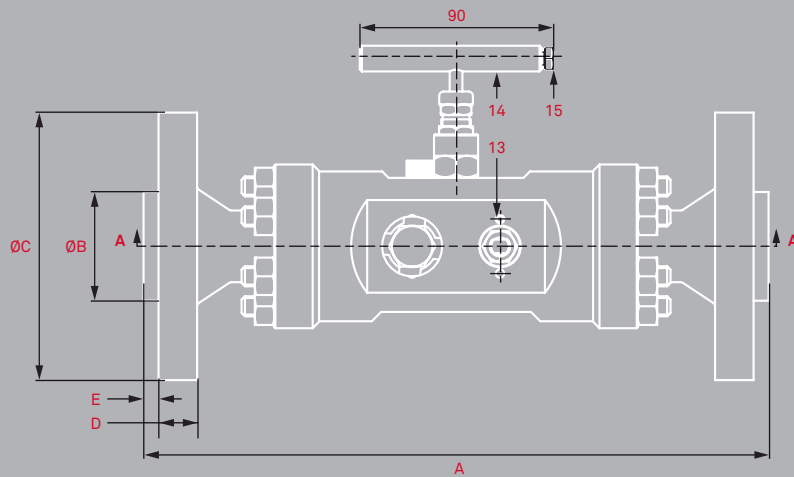
Size	RF	RTJ
1 1/4"	-56	-56
1 1/2"	-56	-56
2 1/2"	+12	+12

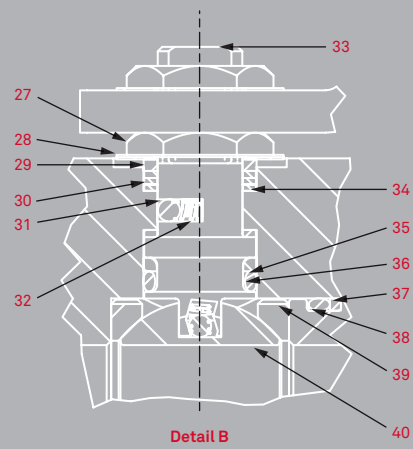
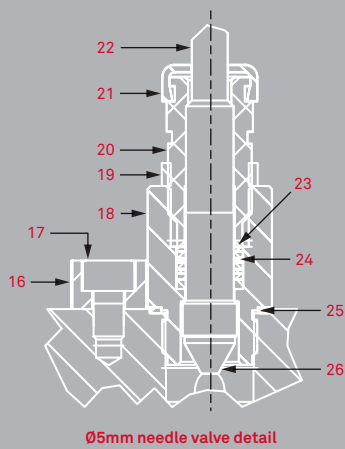
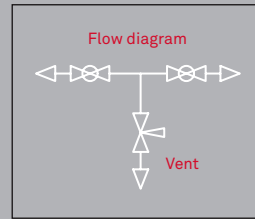
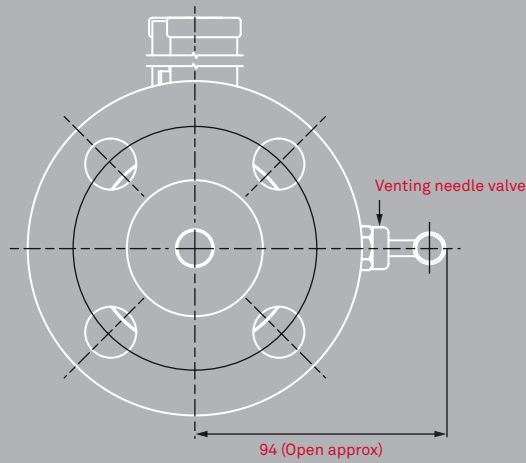
IN ORDER TO OBTAIN OVERALL LENGTH VALUES (A) FOR 2" AND 2 1/2" NPT CONNECTIONS, THE VALUES IN TABLE 3 NEED TO BE ADDED OR SUBTRACTED FROM THE OVERALL LENGTH (A). FOR EXAMPLE, TO CALCULATE THE OVERALL LENGTH FOR AN RF FLANGE x 2 1/2" FEMALE NPT WE ADD 12 TO THE 2" NPT - RF VALUES IN TABLE 1.

XC Ø13 DBB Valve Manifold

Qualifications

- Fire safe to ISO 10497
- Fugitive emission tight ball valve design
- Class A tight to the CO2 level between -29°C > 40°C at pressure of 431 bar (6250 psi) and below
- Class B tight to the CO1 level between -46°C > 100°C at pressure of 431 bar (6250 psi) and below
- API 6A PR2 qualified ball valve design at class 2500
- Endurance tested to 1200 operational cycles at class 2500 in accordance with API 6A criteria
- Ball valves type Approval Tested in accordance with SPE 77-300 at class 2500 + class 600 between +150°C and -29°C





Components Key

Item No.	Description	Material	Quantity
1	BOLT ON FLANGE	#	2
2	STUD	*	12
3	HEX NUT	*	12
4	BODY SEAL	GRAPHITE	2
5	O-RING	ENDURA V91A	2
6	BODY INSERT	A479 UNS S31803	2
7	BODY SEAL	GRAPHITE	2
8	1/2" N.PT BLANK PLUG	†	1
9	BODY	#	1
10	VALVE HANDLE (3)	UNS S31600	2
11	LOCKING PIN	UNS S31600	1
12	LOCKING COLLAR	UNS S31600	1
13	STOP PIN	UNS S31600	2
14	EXTENDED "T" HANDLE	UNS S31600	1
15	HEX CAP SCREW	A4 ST/ST	1
16	LOCKING CAM	UNS S31600	1
17	SHC SCREW	A4 ST/ST	1
18	BONNET HOUSING	‡	1
19	GLAND LOCKNUT	UNS S31600	1
20	GLAND ADJUSTER	UNS S31600	1

Item No.	Description	Material	Quantity
21	DUST CAP	PVC	1
22	NEEDLE STEM	A479 UNS S31803	1
23	PACKING WASHER	RTFE	2
24	GLAND PACKING	GRAPHITE	3
25	BONNET SEAL	UNS S31600	1
26	NEEDLE VALVE TIP	A479 UNS S31803	1
27	3/8" UNF HALF NUT	A4 ST/ST	3
28	BELLEVILLE WASHER	ST/ST	5
29	SPACER	UNS S31600	2
30	ANTI-EXTRUSION RING	PEEK	4
31	2.5mm BALL	B446 UNS N06625	4
32	ANTI-STATIC SPRING	INCONEL X750	4
33	STEM	A479 UNS S31803	2
34	FIRE SAFE SEAL	GRAPHITE	4
35	BACK-UP RING	PEEK	2
36	O-RING	ENDURA V91A	2
37	BACK-UP RING	PEEK	2
38	O-RING	ENDURA V91A	2
39	SEAT	PEEK	4
40	BALL	A890-CD3MN	2

= BODY/FLANGE MATERIAL (S = F316, L = LF2, U = F51)
 * = BOLTING MATERIAL (S & U = B8M/8MA L = L7M/7M)

† = 1/2" VENT PLUG MATERIAL (S & L = A479 UNS S31600, U = A479 UNS S31803)
 ‡ = BONNET HOUSING MATERIAL (S & L = A479 UNS S31600, U = A479 UNS S31803)

ALCO XC Ø13mm Bore

TABLE 1
RF/RTJ Flange x Flange/NPT

Flange size (in)	Class rating	Part No.	A - RF	A - RTJ	A 1/2" NPT - RF	A 1/2" NPT - RTJ	ØB - RF	ØB - RTJ	ØC	D	E - RF	E - RTJ	F	Nominal Mass (kg)
1/2"	150	XC-13#-04AR‡04AR‡-B*-***	270	N/A	265	N/A	34.9	N/A	90	10.1	2.0	N/A	90	7
1/2"	300	XC-13#-04BR‡04BR‡-B*-***	276	282	268	271	34.9	51.1	95	13.2	2.0	5.5	90	8
1/2"	600	XC-13#-04CR‡04CR‡-B*-***	288	286	274	273	34.9	51.1	95	14.8	7.0	5.5	90	8
1/2"	900/1500	XC-13#-04ER‡04ER‡-B*-***	322	320	291	290	34.9	60.6	120	22.8	7.0	6.4	125	10
1/2"	2500	XC-13#-04FR‡04FR‡-B*-***	324	322	292	291	34.9	65.1	135	30.7	7.0	6.4	125	13
3/4"	150	XC-13#-06AR‡06AR‡-B*-***	272	N/A	266	N/A	42.9	N/A	100	11.7	2.0	N/A	90	8
3/4"	300	XC-13#-06BR‡06BR‡-B*-***	288	296	274	278	42.9	63.6	115	14.8	2.0	6.4	125	9
3/4"	600	XC-13#-06CR‡06CR‡-B*-***	300	298	280	279	42.9	63.6	115	16.4	7.0	6.4	125	9
3/4"	900/1500	XC-13#-06ER‡06ER‡-B*-***	324	322	292	291	42.9	66.6	130	25.9	7.0	6.4	125	11
3/4"	2500	XC-13#-06FR‡06FR‡-B*-***	328	326	294	293	42.9	73.1	140	32.3	7.0	6.4	125	14
1"	150	XC-13#-08AR‡08AR‡-B*-***	276	284	268	272	50.8	63.6	110	13.2	2.0	6.4	125	8
1"	300	XC-13#-08BR‡08BR‡-B*-***	278	286	269	273	50.8	70.1	125	16.4	2.0	6.4	125	9
1"	600	XC-13#-08CR‡08CR‡-B*-***	292	290	276	275	50.8	70.1	125	18.0	7.0	6.4	125	10
1"	900/1500	XC-13#-08ER‡08ER‡-B*-***	324	322	292	291	50.8	71.6	150	29.1	7.0	6.4	125	14
1"	2500	XC-13#-08FR‡08FR‡-B*-***	336	336	298	298	50.8	82.6	160	35.5	7.0	6.4	125	17
1 1/2"	150	XC-13#-12AR‡12AR‡-B*-***	272	280	266	270	73.0	82.6	125	16.4	2.0	6.4	125	9
1 1/2"	300	XC-13#-12BR‡12BR‡-B*-***	292	300	276	280	73.0	90.6	155	19.6	2.0	6.4	125	12
1 1/2"	600	XC-13#-12CR‡12CR‡-B*-***	308	306	284	283	73.0	90.6	155	22.8	7.0	6.4	125	13
1 1/2"	900/1500	XC-13#-12ER‡12ER‡-B*-***	336	334	298	297	73.0	92.1	180	32.3	7.0	6.4	125	19
1 1/2"	2500	XC-13#-12FR‡12FR‡-B*-***	340	342	300	301	73.0	114.1	205	45.0	7.0	7.9	160	28
2"	150	XC-13#-16AR‡16AR‡-B*-***	272	280	266	270	92.1	102.1	150	18.0	2.0	6.4	125	11
2"	300	XC-13#-16BR‡16BR‡-B*-***	278	290	269	275	92.1	108.1	165	21.2	2.0	7.9	125	13
2"	600	XC-13#-16CR‡16CR‡-B*-***	298	300	279	280	92.1	108.1	165	25.9	7.0	7.9	125	15
2"	900/1500	XC-13#-16ER‡16ER‡-B*-***	322	324	291	292	92.1	124.1	215	38.6	7.0	7.9	160	27
2"	2500	XC-13#-16FR‡16FR‡-B*-***	348	350	304	305	92.1	133.1	235	51.4	7.0	7.9	160	38

Configuration Metric / mm

= BODY/FLANGE MATERIAL (S=F316, L=LF2, U=F51)
* = BOLTING MATERIAL (2FC=L7M, 8ST=B8M)

‡ = FLANGE TYPE (F=RF, J=RTJ)
*** = HANDLE OPTIONS (SHO=STANDARD, HLK=HANDLE LOCKABLE)

TABLE 2

Flange x NPT	NPT CONFIGURATIONS
XC-13#-04AR‡##02-B*-***	*PLEASE NOTE: PART CODES VARY
XC-13#-04BR‡##02-B*-***	DEPENDING ON THE CONFIGURATION OF THE VALVE. AS SHOWN TO THE LEFT.

= NPT SIZE (03=3/8", 04=1/2", 06=3/4", 08=1")

TABLE 3

Size	RF	RTJ
3/8"	-26	-26
3/4"	+6	+6
1"	+16	+16

IN ORDER TO OBTAIN OVERALL LENGTH VALUES (A) FOR 3/8", 3/4" AND 1" NPT CONNECTIONS, THE VALUES IN TABLE 3 NEED TO BE ADDED OR SUBTRACTED FROM THE OVERALL LENGTH (A). FOR EXAMPLE, TO CALCULATE THE OVERALL LENGTH FOR AN RF FLANGE x 3/8" FEMALE NPT WE SUBTRACT 26 FROM THE 1/2" NPT - RF VALUES IN TABLE 1.

XC Construction

