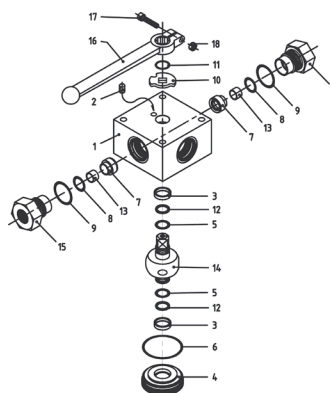
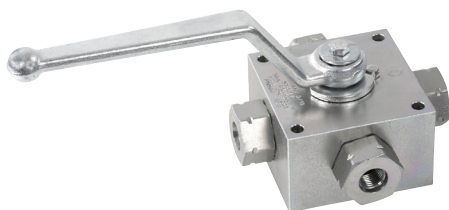


High-Pressure Block Body Ball Valve - Type XBV



List of Components

No.	Qty.	Description
1	1	Body
2	1	Stop Pin
3*	2	Bearing
4	1	Trunnion Retainer
5*	2	Trunnion O-Ring
6*	1	Retainer O-Ring
7*	4	Ball Seat
8*	4	Seat O-Ring
9*	4	Connector O-Ring
10	1	Cam Plate
11	1	Snap Ring
12*	2	Trunnion Back Up Ring
13	4	Seat Support
14	1	Trunnion Ball
15	4	Connector
16	1	Handle
17	1	Handle Bolt

* Included in seal kit

Characteristics

Four-way high-pressure block body ball valves designed for use as 4-way selectors (double L-bore, 90° operation with closed position) for hydraulic applications

Standard Construction

- Block body design for in-line assembly
- Multi-way valve with trunnion-style ball
- Supplied with lever

Standard Materials

- Body: Carbon Steel, zinc/iron-plated
- Ball: Carbon Steel, hard chrome-plated
- Stem: Carbon Steel
- Lever: Aluminium (STAUFF Sizes 02 and 04)
Zinc (STAUFF Sizes 06 to 10)
Aluminium (STAUFF Sizes 12 to 24)
- Ball seat: Delrin® (POM)
- O-rings: FPM (Viton®)

Standard Connections Styles / Sizes

- Female NPT thread (ANSI B1.20.1) >1-1/2 NPT
- Female BSP thread (DIN ISO 228) >G 1-1/2 BSP
- Female UN/UNF thread (SAE J 514) >1-5/16-12 UN (1" SAE)
- 24° cone connection (DIN 2353); Light Series >35L
- 24° cone connection (DIN 2353); Heavy Series >38S

See page F113 for sealing details.

Pressure Range

- Pressure range: up to 500 bar / 7250 PSI (depending on size and material combination of the ball valve)

Temperature Range

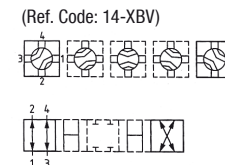
- Operating temperature range:
-20°C ... +100°C / -4°F ... + 212°F

Options / Accessories

- Alternative lever designs/materials (see page F98)
- Locking devices (see pages F99-F101)
- Pneumatic actuator packages (see page F102)
Electrical actuators available on request.
- Limit switches (see page F102)
- Stainless Steel body
- Stainless Steel ball and stem
- Special ball seat and O-ring materials available for lower/higher temperatures and more aggressive media

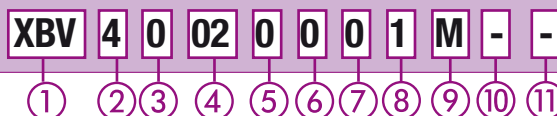
Porting Pattern

- Symbol : X (Ref. Code: 14-XBV)
- Overlap: positive
- Operating: 90° with closed position
- Stop of end position:



Please see pages F104-F105 for alternative porting patterns.

Order Codes



① Type

Multi-Way Double L-Bore Ball Valve **XBV**

② Number of Ports

Four Ports (Four-Way Ball Valve) **4**

③ Connection Style

Female NPT Thread (ANSI B1.20.1)	0
Female BSP Thread (DIN ISO 228)	G
Female UN/UNF Thread (SAE J 514)	1
24° Cone Connection (Light / Heavy Series)	
DN04 DN06 DN08 DN10 DN13 DN16 DN20 DN25	

Please consult STAUFF for alternative connection styles.

④ Connection Size

STAUFF Size (according to dimension table) for connection styles 0, G and 1:										
02	04	06	08	10	12	16	20	24		
Tube Size (according to dimension table) for 24° Cone Connection (Light Series):										
06L	08L	10L	12L	15L	18L	22L	28L	35L		
Tube Size (according to dimension table) for 24° Cone Connection (Heavy Series):										
08S	10S	12S	14S	16S	20S	25S	30S	38S		

Please consult STAUFF for alternative connection sizes.

⑤ Body Material / Surface Finishing

Carbon Steel, zinc/iron-plated	0
Stainless Steel V4A (AISI 316Ti)	1

Alternative materials / surface finishings are available upon request. Consult STAUFF for further information.

⑥ Ball / Stem Material

Ball: Carbon Steel, hard chrome-plated	0
Stem: Carbon Steel	
Ball / Stem: Stainless Steel V4A (AISI 316Ti)	1

Alternative materials / surface finishings are available upon request. Consult STAUFF for further information.

⑦ Ball Seat Material

Delrin® (POM)	0
---------------	----------

Alternative materials are available upon request. Consult STAUFF for further information.

⑧ O-Ring Material

NBR (Buna-N®)	0
FPM (Viton®)	1
EPDM	3

Alternative materials are available upon request. Consult STAUFF for further information.

⑨ Manufacturing Code

Manufacturing code for all connection styles **M**

⑩ Lever Options

Supplied with standard lever (according to table)	-
Supplied without lever	-0

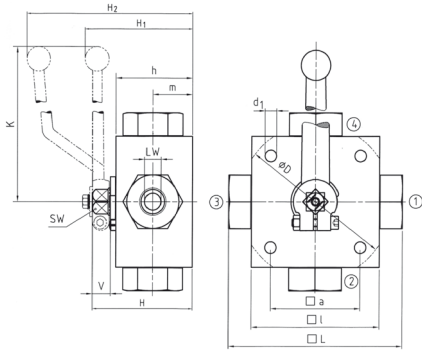
Alternative levers can be ordered separately. Please see page F98 for further information.

⑪ Accessories / Options

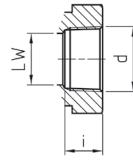
Supplied without accessories	-
Supplied with Locking Device LD4 (standard)	-LD4
Supplied with Double-Acting Pneumatic Actuator (Please add size **)	-EDA**
Supplied with Single-Acting Pneumatic Actuator (Please add size **)	-ESA**
Supplied with Limit Switch in open position	-LS-0
Supplied with Limit Switch in closed position	-LS-C
Supplied with Limit Switch in open and closed position	-LS-OC

Please see page F99 for further information.

High-Pressure Block Body Ball Valve - Type XBV Double L-Bore Four-Way Selector - Female NPT Thread (ANSI B1.20.1)



Female NPT Thread (ANSI B1.20.1)



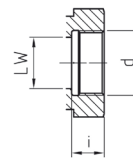
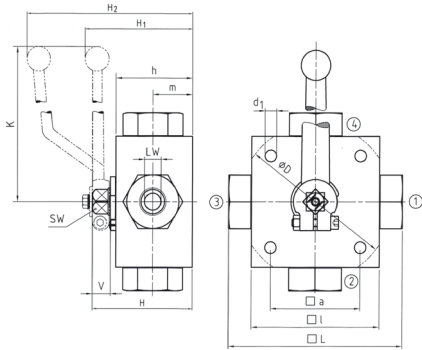
When ordering the standard option as indicated in the table below, the following materials will be supplied:

- Body, ball and stem: Carbon Steel
- Lever: Aluminium (STAUFF Sizes 02 and 04)
Zinc (STAUFF Sizes 06 to 10)
Aluminium (STAUFF Sizes 12 to 24)
- Ball seat: Delrin® (POM)
- O-rings: FPM (Viton®)

STAUFF Size	Thread Size d	Nominal Size DN	Dimensions (mm/in)													Nom. Pressure (bar/PSI)	Weight (kg/lbs)	Order Codes (Standard Option)	
			LW	L	D	l	a	H	h	m	K	V	SW	i	d1				H1
02	1/8 NPT	4	4	100	70	55	58	40	22	160	14	12	10,5	6,5	101	500	1,60	XBV40020001M	
			.16	3.94		2.76	2.17	2.28	1.57	.87	6.30	.55	.47	.41		.26	3.98		7250
04	1/4 NPT	6	4	100	70	55	58	40	22	160	14	12	13,7	6,5	101	500	1,60	XBV40040001M	
			.16	3.94		2.76	2.17	2.28	1.57	.87	6.30	.55	.47	.54		.26	3.98		7250
06	3/8 NPT	10	7	115	80	65	68	50	27	200	14	14	13,5	6,5	72	500	2,80	XBV40060001M	
			.28	4.53		3.15	2.56	2.68	1.97	1.06	7.87	.55	.55	.53		.26	2.83		7250
08	1/2 NPT	13	10	136	100	80	78	60	31	200	14	14	17	9	82	400	4,90	XBV40080001M	
			.39	5.35		3.94	3.15	3.07	2.36	1.22	7.87	.55	.55	.67		.35	3.23		5800
12	3/4 NPT	20	14	154	138	113	85	88	67	36,5	320	16,5	17	18,3	8,5	96	315	6,80	XBV40120001M
			.55	6.06	5.43	4.45	3.35	3.46	2.64	1.44	12.60	.65	.67	.72	.33	3.78	4567	14.96	
16	1 NPT	25	17	172	138	119	85	103	82	47,5	320	16,5	17	21,6	8,5	112	315	8,50	XBV40160001M
			.67	6.77	5.43	4.69	3.35	4.06	3.23	1.87	12.60	.65	.67	.85	.33	4.41	4567	18.70	
20	1-1/4 NPT	25/32	17	180	138	119	85	103	82	47,5	320	16,5	17	22,1	8,5	112	315	8,80	XBV40200001M
			.67	7.09	5.43	4.69	3.35	4.06	3.23	1.87	12.60	.65	.67	.87	.33	4.41	4567	19.36	
24	1-1/2 NPT	25/40	17	180	138	119	85	103	82	47,5	320	16,5	17	22,1	8,5	112	250	8,80	XBV40240001M
			.67	7.09	5.43	4.69	3.35	4.06	3.23	1.87	12.60	.65	.67	.87	.33	4.41	3625	19.36	

Please note the pressure ratings of the tube connections.

High-Pressure Block Body Ball Valve - Type XBV Double L-Bore Four-Way Selector - Female BSP Thread (DIN ISO 228)



When ordering the standard option as indicated in the table below, the following materials will be supplied:

- Body, ball and stem: Carbon Steel
- Lever: Aluminium (STAUFF Sizes 02 and 04)
Zinc (STAUFF Sizes 06 to 10)
Aluminium (STAUFF Sizes 12 to 24)
- Ball seat: Delrin® (POM)
- O-rings: FPM (Viton®)

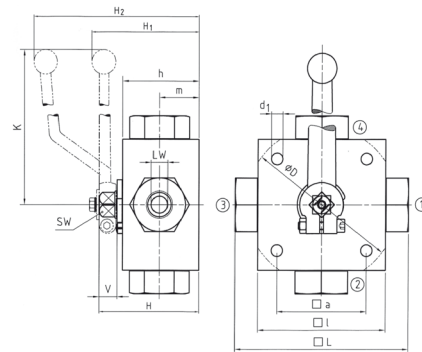
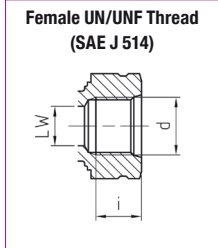
STAUFF Size	Thread Size d	Nominal Size DN	Dimensions (mm/in)													Nom. Pressure (bar/PSI)	Weight (kg/lbs)	Order Codes (Standard Option)	
			LW	L	D	l	a	H	h	m	K	V	SW	i	d1				H1
02	G 1/8 BSP	4	4	100	70	55	58	40	22	160	14	12	10	6,5	101	500	1,60	XBV4G020001M	
			.16	3.94		2.76	2.17	2.28	1.57	.87	6.30	.55	.47	.39		.26	3.98		7250
04	G 1/4 BSP	6	4	100	70	55	58	40	22	160	14	12	14	6,5	101	500	1,60	XBV4G040001M	
			.16	3.94		2.76	2.17	2.28	1.57	.87	6.30	.55	.47	.55		.26	3.98		7250
06	G 3/8 BSP	10	7	115	80	65	68	50	27	200	14	14	14	6,5	72	500	2,80	XBV4G060001M	
			.28	4.53		3.15	2.56	2.68	1.97	1.06	7.87	.55	.55	.55		.26	2.83		7250
08	G 1/2 BSP	13	10	136	100	80	78	60	31	200	14	14	16,3	9	82	400	4,90	XBV4G080001M	
			.39	5.35		3.94	3.15	3.07	2.36	1.22	7.87	.55	.55	.64		.35	3.23		5800
10	G 5/8 BSP	16	10	139	100	80	78	60	31	200	14	14	18	9	82	400	4,90	XBV4G100001M	
			.39	5.47		3.94	3.15	3.07	2.36	1.22	7.87	.55	.55	.71		.35	3.23		5800
12	G 3/4 BSP	20	14	154	138	113	85	88	67	36,5	320	16,5	17	18	8,5	96	315	6,80	XBV4G120001M
			.55	6.06	5.43	4.45	3.35	3.46	2.64	1.44	12.60	.65	.67	.71	.33	3.78	4567	14.96	
16	G 1 BSP	25	17	172	138	119	85	103	82	47,5	320	16,5	17	20	8,5	112	315	8,50	XBV4G160001M
			.67	6.77	5.43	4.69	3.35	4.06	3.23	1.87	12.60	.65	.67	.79	.33	4.41	4567	18.70	
20	G 1-1/4 BSP	25/32	17	180	138	119	85	103	82	47,5	320	16,5	17	22	8,5	112	315	8,80	XBV4G200001M
			.67	7.09	5.43	4.69	3.35	4.06	3.23	1.87	12.60	.65	.67	.87	.33	4.41	4567	19.36	
24	G 1-1/2 BSP	25/40	17	180	138	119	85	103	82	47,5	320	16,5	17	24	8,5	112	250	8,80	XBV4G240001M
			.67	7.09	5.43	4.69	3.35	4.06	3.23	1.87	12.60	.65	.67	.94	.33	4.41	3625	19.36	

Please note the pressure ratings of the tube connections.

High-Pressure Block Body Ball Valve - Type XBV
Double L-Bore Four-Way Selector - Female UN/UNF Thread (SAE J 514)

When ordering the standard option as indicated in the table below, the following materials will be supplied:

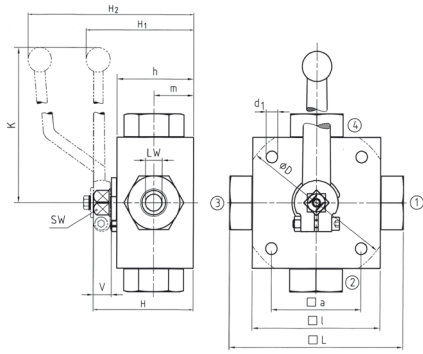
- Body, ball and stem: Carbon Steel
- Lever: Aluminium (STAUFF Size 04)
Zinc (STAUFF Sizes 06 and 08)
Aluminium (STAUFF Sizes 12 and 16)
- Ball seat: Delrin® (POM)
- O-rings: FPM (Viton®)



STAUFF Size	Thread Size d	Nominal Size DN	Dimensions (mm/in)																Nom. Pressure (bar/PSI)	Weight (kg/lbs)	Order Codes (Standard Option)
			LW	L	D	i	a	H	h	m	K	V	SW	i	d1	H1	H2				
04	7/16-20 UNF (1/4" SAE)	6	4	100	/	70	55	58	40	22	160	14	12	14	6,5	101	500	1,60	XBV41040001M		
			.16	3,94		2,76	2,17	2,28	1,57	0,87	6,30	0,55	0,47	0,55	0,26	3,98	7250	3,52			
06	9/16-18 UNF (3/8" SAE)	10	7	115	/	80	65	68	50	27	200	14	14	14	6,5	72	500	2,80	XBV41060001M		
			.28	4,53		3,15	2,56	2,68	1,97	1,06	7,87	0,55	0,55	0,55	0,26	2,83	7250	6,16			
08	3/4-16 UNF (1/2" SAE)	13	10	144	/	100	80	78	60	31	200	14	14	16,3	9	82	400	5,20	XBV41080001M		
			.39	5,67		3,94	3,15	3,07	2,36	1,22	7,87	0,55	0,55	0,64	0,35	3,23	5800	11,44			
12	1-1/16-12 UN (3/4" SAE)	20	14	164	138	113	85	88	67	36,5	320	16,5	17	18	8,5	96	315	6,80	XBV41120001M		
			.55	6,46	5,43	4,45	3,35	3,46	2,64	1,44	12,60	0,65	0,67	0,71	0,33	3,78	4567	14,96			
16	1-5/16-12 UN (1" SAE)	25	17	180	138	119	85	103	82	47,5	320	16,5	17	20	8,5	112	315	8,50	XBV41160001M		
			.67	7,09	5,43	4,69	3,35	4,06	3,23	1,87	12,60	0,65	0,67	0,79	0,33	4,41	4567	18,70			

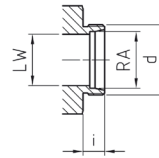
Please note the pressure ratings of the tube connections.

High-Pressure Block Body Ball Valve - Type XBV Double L-Bore Four-Way Selector - 24° Cone Connection Light Series (DIN 2353 / ISO 8434-1)



Hex nuts and cutting rings are not included in delivery.

24° Cone Connection (DIN 2353 / ISO 8434-1)

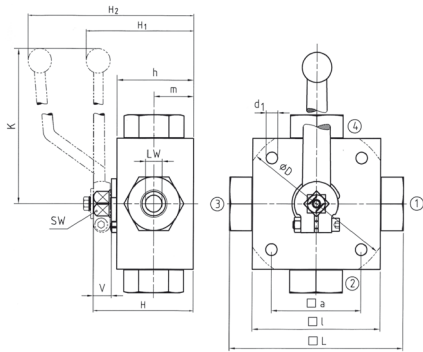


When ordering the standard option as indicated in the table below, the following materials will be supplied:

- Body, ball and stem: Carbon Steel
- Lever: Aluminium (STAUFF Sizes 02 and 04)
Zinc (STAUFF Sizes 05 to 10)
Aluminium (STAUFF Sizes 12 to 20)
- Ball seat: Delrin® (POM)
- O-rings: FPM (Viton®)

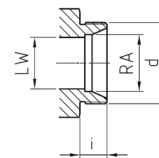
STAUFF Size	Tube/Thread Size d	Nominal Size DN	Dimensions (mm/in)													Nom. Pressure (bar/psi)	Weight (kg/lbs)	Order Codes (Standard Option)		
			RA	LW	L	D	l	a	H	h	m	K	V	SW	i				d1	H1
02	06L / M12 x 1,5	4	6	4	105	70	55	58	40	22	160	14	12	10	6,5	101	500	1,60	XBV4DN0406L0001M	
			.24	.16	4.13	2.76	2.17	2.28	1.57	.87	6.30	.55	.47	.39	.26	3.98	7250	3.52		
04	08L / M14 x 1,5	6	8	4	105	70	55	58	40	22	160	14	12	10	6,5	101	500	1,80	XBV4DN0608L0001M	
			.31	.16	4.13	2.76	2.17	2.28	1.57	.87	6.30	.55	.47	.39	.26	3.98	7250	3.96		
05	10L / M16 x 1,5	8	10	7	114	80	65	68	50	27	200	14	14	11	6,5	72	500	2,60	XBV4DN0810L0001M	
			.39	.28	4.49	3.15	2.56	2.68	1.97	1.06	7.87	.55	.55	.43	.26	2.83	7250	5.72		
06	12L / M18 x 1,5	10	12	7	114	80	65	68	50	27	200	14	14	11	6,5	72	500	2,60	XBV4DN1012L0001M	
			.47	.28	4.49	3.15	2.56	2.68	1.97	1.06	7.87	.55	.55	.43	.26	2.83	7250	5.72		
08	15L / M22 x 1,5	13	15	10	137	100	80	78	60	31	200	14	14	12	9	82	400	4,70	XBV4DN1315L0001M	
			.59	.39	5.39	3.94	3.15	3.07	2.36	1.22	7.87	.55	.55	.47	.35	3.23	5800	10.34		
10	18L / M26 x 1,5	16	18	10	137	113	85	88	67	36,5	320	16,5	17	12	8,5	82	400	4,70	XBV4DN1618L0001M	
			.71	.39	5.39	4.45	3.35	3.46	2.64	1.44	12.60	.65	.67	.47	.33	3.23	5800	10.34		
12	22L / M30 x 2	20	22	14	152	138	119	85	103	82	47,5	320	16,5	17	14	8,5	96	315	6,60	XBV4DN2022L0001M
			.87	.55	5.98	5.43	4.69	3.35	4.06	3.23	1.87	12.60	.65	.67	.55	.33	3.78	4567	14.52	
16	28L / M36 x 2	25	28	17	166	138	119	85	103	82	47,5	320	16,5	17	14	8,5	112	315	8,00	XBV4DN2528L0001M
			1.10	.67	6.54	5.43	4.69	3.35	4.06	3.23	1.87	12.60	.65	.67	.55	.33	4.41	4567	17.60	
20	35L / M45 x 2	25/32	35	17	170	138	119	85	103	82	47,5	320	16,5	17	16	8,5	112	315	8,12	XBV4DN2535L0001M
			1.38	.67	6.69	5.43	4.69	3.35	4.06	3.23	1.87	12.60	.65	.67	.63	.33	4.41	4567	17.86	

Please note the pressure ratings of the tube connections.



Hex nuts and cutting rings are not included in delivery.

24° Cone Connection (DIN 2353 / ISO 8434-1)



When ordering the standard option as indicated in the table below, the following materials will be supplied:

- Body, ball and stem: Carbon Steel
- Lever: Aluminium (STAUFF Sizes 02 and 04)
Zinc (STAUFF Sizes 05 to 10)
Aluminium (STAUFF Sizes 12 to 20)
- Ball seat: Delrin® (POM)
- O-rings: FPM (Viton®)

STAUFF Size	Thread Size d	Nominal Size DN	Dimensions (mm/in)													Nom. Pressure (bar/psi)	Weight (kg/lbs)	Order Codes (Standard Option)		
			RA	LW	L	D	l	a	H	h	m	K	V	SW	i				d1	H1
02	08S / M16 x 1,5	4	8	4	105	70	55	58	40	22	160	14	12	12	6,5	101	500	1,60	XBV4DN0408S0001M	
			.31	.16	4.13	2.76	2.17	2.28	1.57	.87	6.30	.55	.47	.47	.26	3.98	7250	3.52		
04	10S / M18 x 1,5	6	10	4	105	70	55	58	40	22	160	14	12	12	6,5	101	500	1,80	XBV4DN0610S0001M	
			.39	.16	4.13	2.76	2.17	2.28	1.57	.87	6.30	.55	.47	.47	.26	3.98	7250	3.96		
05	12S / M20 x 1,5	8	12	7	116	80	65	68	50	27	200	14	14	12	6,5	72	500	2,60	XBV4DN0812S0001M	
			.47	.28	4.57	3.15	2.56	2.68	1.97	1.06	7.87	.55	.55	.47	.26	2.83	7250	5.72		
06	14S / M22 x 1,5	10	14	7	120	80	65	68	50	27	200	14	14	14	6,5	72	500	2,60	XBV4DN1014S0001M	
			.55	.28	4.72	3.15	2.56	2.68	1.97	1.06	7.87	.55	.55	.55	.26	2.83	7250	5.72		
08	16S / M24 x 1,5	13	16	10	141	100	80	78	60	31	200	14	14	14	9	82	400	4,70	XBV4DN1316S0001M	
			.63	.39	5.55	3.94	3.15	3.07	2.36	1.22	7.87	.55	.55	.55	.35	3.23	5800	10.34		
10	20S / M30 x 2	16	20	10	145	113	85	88	67	36,5	320	16,5	17	16	8,5	82	400	4,70	XBV4DN1620S0001M	
			.79	.39	5.71	4.45	3.35	3.46	2.64	1.44	12.60	.65	.67	.63	.33	3.23	5800	10.34		
12	25S / M36 x 2	20	25	14	160	138	119	85	103	82	47,5	320	16,5	17	18	8,5	96	315	6,60	XBV4DN2025S0001M
			.98	.55	6.30	5.43	4.69	3.35	4.06	3.23	1.87	12.60	.65	.67	.71	.33	3.78	4567	14.52	
16	30S / M42 x 2	25	30	17	138	138	119	85	103	82	47,5	320	16,5	17	20	8,5	112	315	8,00	XBV4DN2530S0001M
			1.18	.67	6.93	5.43	4.69	3.35	4.06	3.23	1.87	12.60	.65	.67	.79	.33	4.41	4567	17.60	
20	38S / M52 x 2	25/32	38	17	180	138	119	85	103	82	47,5	320	16,5	17	22	8,5	112	315	8,12	XBV4DN2538S0001M
			1.50	.67	7.09	5.43	4.69	3.35	4.06	3.23	1.87	12.60	.65	.67	.87	.33	4.41	4567	17.86	

Please note the pressure ratings of the tube connections.