AN INTRODUCTION TO BUTECH BALL VALVES

BuTech ball valves are available in 2-, 3-, 4- and 5-way designs with an infinite combination of connections including male and female NPT, low-pressure compression fittings, medium- and high-pressure tube ends, medium- and high-pressure female, JIC 37° flare, SAE O-ring boss, socket-weld, butt-weld, and metric connections. They are available with special seal materials or manufactured from any machinable metal for extreme applications. They can also be fitted with pneumatic or electric actuators for remote control.

Features:

- Pressures to 20,000 PSI (1380 bar) at 72°F (22°C)
- Pressure loaded seats assure positive sealing
- Blowout-proof stem and ball provides maximum safety
- Choice of replaceable connections for installation versatility
- Straight-through flow path minimizes pressure drop
- Quarter-turn operation accommodates quick open and close needs
- Flow indicating handle indicates valve position at a glance
- Bi-directional flow capabilities

Applications:

All types of instrumentation

Laboratories

Refineries

Hydraulic and pneumatic piping

Chromatography

Gauge shut-off and vent

Control panels

High purity systems

Chemical research

Food processing

Pilot plants

Water blasting

Gas analysis

Test Stands

Moderate vacuum systems

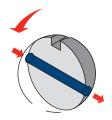
Down-hole control systems on off-shore drilling platforms

Materials of Construction:

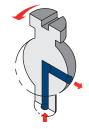
Standard materials of construction include 316 cold-worked stainless steel, 17-4PH, PEEK, Viton, virgin PTFE and glass-filled PTFE. These valves may also be produced in any machinable metal with special seal materials. Please consult factory.

Selecting the Proper Ball Type

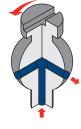
BuTech ball valves offer a variety of flow configurations. See page BV-20 for additional information.



2-way Shut-Off



3-way & 5-way Switching



3-way Diverting

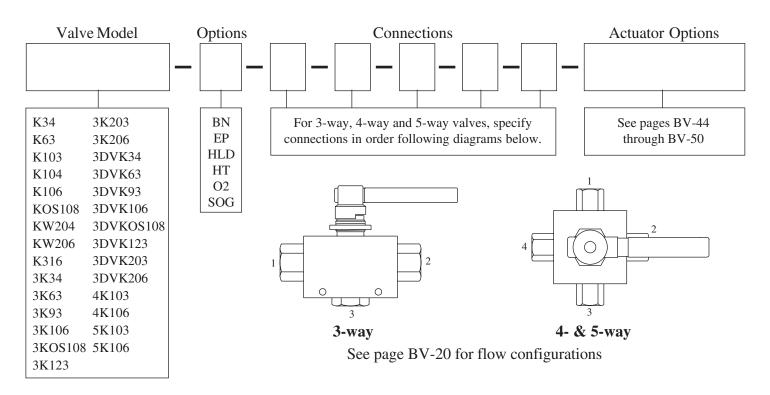


4-way Crossover





ORDERING INFORMATION



Examples:

A 2-way valve with 0.250" port, 10,000 PSI with 3/8" female NPT connections and Buna-N o-rings **K104-BN-21-21**

A 2-way valve with 0.375" port, 20,000 PSI with 1/2" female NPT and 9/16" male M/P coned-and-threaded connections and double-acting pneumatic actuator

KW206-22-11-RA05DA

A 3-way valve for switching service with 0.500" port, 10,000 PSI with 1/2" female NPT side connections and 3/4" male NPT bottom connection for high-temperature service

3KOS108-HT-22-22-55B

A 4-way valve with 0.187" port, 10,000 PSI with (2) 1/4" FNPT connections and (2) 3/8" FNPT connections

4K103-20-20-21-21

<u>Options:</u>

-BN	Buna-N o-rings
-EP	EPR o-rings
-HLD	Handle locking device (prevents unauthorized opening/closing of valve)
-HT	High-temperature o-rings for continuous service to 550°F (288°C)
-O2	Cleaned for oxygen service
-SOG	For Sour Gas service in accordance with NACE MR-01-75

BuTech ball valves may be manufactured from any machinable metal and fitted with special seal materials. Please consult factory for information.





BALL VALVE LOCATOR

	Model No.	Maximum l	Pressure*	Po	ort	Cv	Page
	K34	3,000 PSI	210 bar	0.250"	(6.4)	1.40	BV-4
2-way Valves for On-Off Service	K316	3,000 PSI	210 bar	1.000"	(25.4)	36.00	BV-5
	K63	6,000 PSI	410 bar	0.187"	(4.7)	0.75	BV-6
	K103	10,000 PSI	690 bar	0.187"	(4.7)	0.75	BV-8
Val F S	K104	10,000 PSI	690 bar	0.250"	(6.4)	1.40	BV-10
vay V. n-Off	K106	10,000 PSI	690 bar	0.375"	(9.5)	3.40	BV-12
N-2-w	KOS108	10,000 PSI	690 bar	0.500"	(12.7)	10.00	BV-14
	KW204	20,000 PSI	1380 bar	0.250"	(6.4)	1.40	BV-16
	KW206	20,000 PSI	1380 bar	0.375"	(9.5)	3.40	BV-18
	3K34	3,000 PSI	210 bar	0.250"	(6.4)	1.00	BV-21
ي ي	3K63	6,000 PSI	410 bar	0.187"	(4.7)	0.56	BV-22
3-way Valves for Switching Service	3K93	10,000 PSI	690 bar	0.187"	(4.7)	0.56	BV-24
ves Se	3K106	10,000 PSI	690 bar	0.375"	(9.5)	2.40	BV-26
Va] ing	3KOS108	10,000 PSI	690 bar	0.500"	(12.7)	5.00	BV-28
ray tch	3K123	12,000 PSI	830 bar	0.187"	(4.7)	0.56	BV-30
3-w	3K203	20,000 PSI	1380 bar	0.187"	(4.7)	0.56	BV-32
02	3K206	20,000 PSI	1380 bar	0.375"	(9.5)	2.40	BV-34
		•					
	3DVK34	3,000 PSI	210 bar	0.250"	(6.4)	1.00	BV-21
3-way Valves for Diverting Service	3DVK63	6,000 PSI	410 bar	0.187"	(4.7)	0.56	BV-22
3-way Valves for Diverting Service	3DVK93	10,000 PSI	690 bar	0.187"	(4.7)	0.56	BV-24
zalv g S	3DVK106	10,000 PSI	690 bar	0.375"	(9.5)	2.40	BV-26
tin V	3DVKOS108	10,000 PSI	690 bar	0.500"	(12.7)	5.00	BV-28
-wa	3DVK123	12,000 PSI	830 bar	0.187"	(4.7)	0.56	BV-30
D	3DVK203	20,000 PSI	1380 bar	0.187"	(4.7)	0.56	BV-32
	3DVK206	20,000 PSI	1380 bar	0.375"	(9.5)	2.40	BV-34
& × 8	4K103	10,000 PSI	690 bar	0.187"	(4.7)	0.56	BV-36
-way & 5-way Valves	5K103	10,000 PSI	690 bar	0.187"	(4.7)	0.56	BV-40
4-way 5-way Valve	4K106	10,000 PSI	690 bar	0.375"	(9.5)	2.40	BV-38
4	5K106	10,000 PSI	690 bar	0.375"	(9.5)	2.40	BV-42

NOTE: Standard operating temperature range is -20 to 400° F (-28 to 204°C). For applications requiring higher temperatures, select the **-HT** option shown on page BV-2.





3000 PSI (210 BAR) 2-WAY BALL VALVES

Model No. K34

*MAWP: 3,000 PSI (210 bar) Port: 0.250" (6.4 mm)

Cv: 1.40

Materials of Construction:

- -316 cold-worked stainless steel body and side adapters
- -316 cold-worked stem
- -PEEK ball seals
- -Glass-filled PTFE stem packings
- -Viton O-rings

Ordering information and options on page BV-2

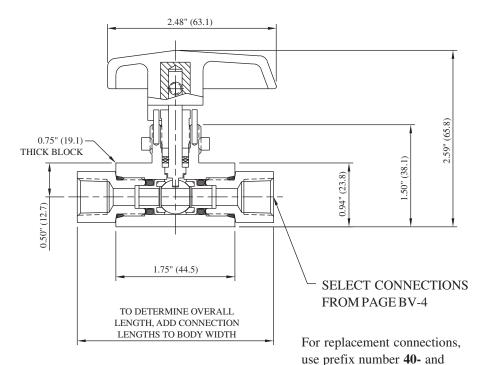
Repair Kit P/N RK-K34 contains ball, ball seals and seal retainers, o-rings, pins, stem, stem packings, and washers

Non-shaded items in-stock and available Shaded items manufactured to order

Mounting:

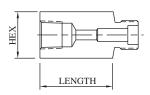
Panel: 0.78" (19.8 mm) dia

0.37" (9.4 mm) max thickness



FEMALE PIPE

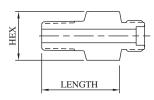
Connection	Suffix	Hex	Length	Port	MAWP*
1/8" FNPT	19	0.75"	0.58"	0.250"	15,000 PSI
1/6 FNF1	19	(19.1)	(14.7)	(6.4)	1030 bar
1/4" FNPT	20	0.75"	0.58"	0.250"	15,000 PSI
1/4 FNF1	20	(19.1)	(14.7)	(6.4)	1030 bar
3/8" FNPT	21	1.00"	0.75"	0.250"	15,000 PSI
3/6 FINE I		(25.4)	(19.1)	(6.4)	1030 bar
1/2" FNPT	22	1.18"	1.00"	0.250"	15,000 PSI
1/2 FINE I	22	(30.0)	(25.4)	(6.4)	1030 bar



suffix number. Ex: 40-20

MALE PIPE

Connection	Suffix	Hex	Length	Port	MAWP*
1/8" MNPT	4	0.75"	0.97"	0.250"	15,000 PSI
1/6 WINF I	*	(19.1)	(24.6)	(6.4)	1030 bar
1/4" MNPT	5	0.75"	1.19"	0.250"	15,000 PSI
1/4 WINF I	5	(19.1)	(30.2)	(6.4)	1030 bar
3/8" MNPT	6	1.00"	1.30"	0.250"	15,000 PSI
3/8" MNP1	6	(25.4)	(33.0)	(6.4)	1030 bar
1/2" MNPT	7	1.00"	1.55"	0.250"	15,000 PSI
1/2 WINF I	,	(25.4)	(39.4)	(6.4)	1030 bar







3000 PSI (210 BAR) 2-WAY BALL VALVES

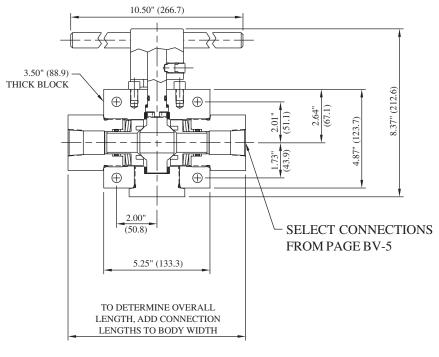
Mounting:

Side: 0.47" (11.9 mm) dia

Model No.

K316

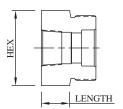
SPECIAL ORDER



Non-shaded items in-stock and available Shaded items manufactured to order

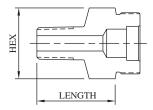
FEMALE PIPE

Connection	Suffix	Hex	Length	Port	MAWP*
3/4" FNPT	41	2.75"	1.05"	0.922"	10,000 PSI
3/4 FNF1	41	(69.9)	(26.7)	(23.4)	690 bar
1" FNPT	45	2.75"	1.22"	1.102"	10,000 PSI
I FNPI		(69.9)	(31.0)	(28.0)	690 bar
1-1/2" FNPT	46	2.75"	1.63"	1.102"	5,000 PSI
		(69.9)	(41.4)	(28.0)	340 bar



MALE PIPE

Connection	Suffix	Hex	Length	Port	MAWP*
3/4" MNPT	55	2.75"	1.82"	0.625"	10,000 PSI
3/4 WINT I		(69.9)	(46.2)	(15.9)	690 bar
1" MNPT	56	2.75"	2.03"	0.687"	10,000 PSI
I WINF I		(69.9)	(51.6)	(17.4)	690 bar
1-1/2" MNPT	121	2.75"	1.96"	1.102"	5,000 PSI
		(69.9)	(49.8)	(28.0)	340 bar







6000 PSI (410 BAR) 2-WAY BALL VALVES

Model No. K63

*MAWP: 6,000 PSI (410 bar) Port: 0.187" (4.7 mm)

Cv: 0.75

Materials of Construction:

- -316 cold-worked stainless steel body and side adapters
- -316 cold-worked stem
- -PEEK ball seals
- -Glass-filled PTFE stem packings
- -Viton O-rings

Ordering information and options on page BV-2

Repair Kit P/N RK-K63 contains ball, ball seals and seal retainers, o-rings, spring washers, stem, stem packings, and washers

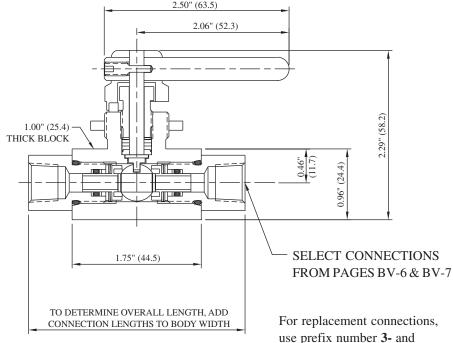
Non-shaded items in-stock and available Shaded items manufactured to order

Mounting:

Panel: 0.91" (23.0 mm) dia

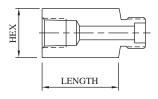
0.31" (7.8 mm) max thickness

suffix number. Ex: 3-20



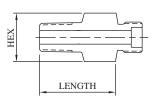
FEMALE PIPE

Connection	Suffix	Hex	Length	Port	MAWP*
1/8" FNPT	19	0.75"	0.60"	0.250"	15,000 PSI
1/6 1 111 1	19	(19.1)	(15.2)	(6.4)	1030 bar
1/4" FNPT	20	0.75"	0.60"	0.250"	15,000 PSI
1/4 FNF1	20	(19.1)	(15.2)	(6.4)	1030 bar
3/8" FNPT	21	1.00"	1.01"	0.250"	15,000 PSI
3/8" FNP1		(25.4)	(25.7)	(6.4)	1030 bar
1/2" FNPT	22	1.00"	1.01"	0.250"	15,000 PSI
1/2 FNF1	22	(25.4)	(25.7)	(6.4)	1030 bar



MALE PIPE

Connection	Suffix	Hex	Length	Port	MAWP*
1/8" MNPT	4	0.75"	1.01"	0.125"	15,000 PSI
1/6 WINF I	*	(19.1)	(25.7)	(3.2)	1030 bar
1/4" MNPT	5	0.75"	1.01"	0.250"	15,000 PSI
1/4 WINF1	3	(19.1)	(25.7)	(6.4)	1030 bar
3/8" MNPT	6	0.75"	1.01"	0.250"	15,000 PSI
3/8 MINP1		(19.1)	(25.7)	(6.4)	1030 bar
1/2" MNPT	7	1.00"	1.26"	0.250"	15,000 PSI
1/2 WINF I	/	(25.4)	(32.0)	(6.4)	1030 bar







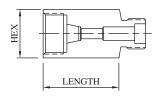
6000 PSI (410 BAR) 2-WAY BALL VALVES

Non-shaded items in-stock and available Shaded items manufactured to order Model No.

K63

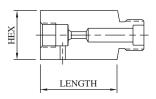
FEMALE SINGLE-FERRULE TUBE

Connection	Suffix	Hex	Length	Port	MAWP*
1/8" L/P	12	0.75"	0.78"	0.093"	15,000 PSI
1/0 L/F	12	(19.1)	(19.8)	(2.4)	1030 bar
1/4" SL/P	13	0.75"	1.03"	0.125"	11,500 PSI
1/4 SL/F	13	(19.1)	(26.2)	(3.2)	790 bar
3/8" SL/P	14	0.75"	1.03"	0.250"	7,500 PSI
3/8" SL/P	14	(19.1)	(26.2)	(6.4)	520 bar
1/2" L/P	15	1.00"	1.03"	0.250"	5,500 PSI
1/2 L/P	15	(25.4)	(26.2)	(6.4)	380 bar



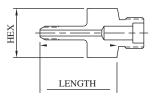
FEMALE M/P CONED AND THREADED TUBE

Connection	Suffix	Hex	Length	Port	MAWP*
1/4" M/P	16	0.75"	0.74"	0.109"	20,000 PSI
1/4 IVI/F		(19.1)	(18.8)	(2.8)	1380 bar
3/8" M/P	17	0.75"	1.01"	0.203"	20,000 PSI
		(19.1)	(25.7)	(5.2)	1380 bar
9/16" M/P	18	1.00"	1.26"	0.250"	20,000 PSI
9/10 IVI/F		(25.4)	(32.0)	(6.4)	1380 bar



MALE M/P CONED AND THREADED TUBE

Connection	Suffix	Hex	Length	Port	MAWP*
1/4" M/P	8	0.75"	1.88"	0.109"	20,000 PSI
1/4 IVI/P		(19.1)	(47.8)	(2.8)	1380 bar
3/8" M/P	10	0.75"	2.00"	0.203"	20,000 PSI
3/8 IVI/P		(19.1)	(50.8)	(5.2)	1380 bar
9/16" M/P	11	1.00"	2.31"	0.250"	20,000 PSI
9/10 WI/F		(25.4)	(58.7)	(6.4)	1380 bar







Model No. K103

*MAWP: 10,000 PSI (690 bar) Port: 0.187" (4.7 mm)

Cv: 0.75

Materials of Construction:

- -316 cold-worked stainless steel body and side adapters
- -316 cold-worked stem
- -PEEK ball seals
- -Glass-filled PTFE stem packings
- -Viton O-rings

Ordering information and options on page BV-2

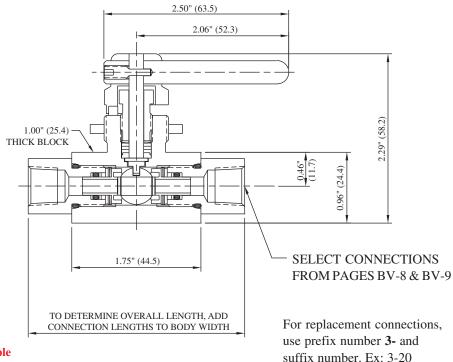
Repair Kit P/N RK-K103 contains ball, ball seals and seal retainers, o-rings, spring washers, stem, stem packings, and washers

Non-shaded items in-stock and available Shaded items manufactured to order

Mounting:

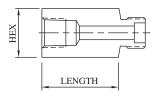
Panel: 0.91" (23.0 mm) dia

0.31" (7.8 mm) max thickness



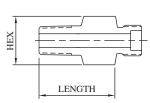
FEMALE PIPE

Connection	Suffix	Hex	Length	Port	MAWP*
1/8" FNPT	19	0.75"	0.60"	0.250"	15,000 PSI
1/6 1/11/1	19	(19.1)	(15.2)	(6.4)	1030 bar
1/4" FNPT	20	0.75"	0.60"	0.250"	15,000 PSI
1/4 1/11/1	20	(19.1)	(15.2)	(6.4)	1030 bar
3/8" FNPT	21	1.00"	1.01"	0.250"	15,000 PSI
3/8 FNP1		(25.4)	(25.7)	(6.4)	1030 bar
1/2" FNPT	22	1.00"	1.01"	0.250"	15,000 PSI
1/2 11111	22	(25.4)	(25.7)	(6.4)	1030 bar



MALE PIPE

Connection	Suffix	Hex	Length	Port	MAWP*
1/8" MNPT	4	0.75"	1.01"	0.125"	15,000 PSI
1/0 IVIINF I	+	(19.1)	(25.7)	(3.2)	1030 bar
1/4" MNPT	5	0.75"	1.01"	0.250"	15,000 PSI
1/4 WINT 1	3	(19.1)	(25.7)	(6.4)	1030 bar
3/8" MNPT	6	0.75"	1.01"	0.250"	15,000 PSI
5/6 WINF I	U	(19.1)	(25.7)	(6.4)	1030 bar
1/2" MNPT	7	1.00"	1.26"	0.250"	15,000 PSI
1/2 WINF1	/	(25.4)	(32.0)	(6.4)	1030 bar







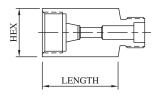
Non-shaded items in-stock and available — Shaded items manufactured to order

Model No.

K103

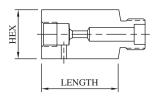
FEMALE SINGLE-FERRULE TUBE

Connection	Suffix	Hex	Length	Port	MAWP*
1/8" L/P	12	0.75"	0.78"	0.093"	15,000 PSI
1/0 L/F	12	(19.1)	(19.8)	(2.4)	1030 bar
1/4" SL/P	13	0.75"	1.03"	0.125"	11,500 PSI
1/4 SL/P	13	(19.1)	(26.2)	(3.2)	790 bar
3/8" SL/P	14	0.75"	1.03"	0.250"	7,500 PSI
3/8 SL/P	14	(19.1)	(26.2)	(6.4)	520 bar
1/2" L/P	15	1.00"	1.03"	0.250"	5,500 PSI
1/2 L/F	15	(25.4)	(26.2)	(6.4)	380 bar



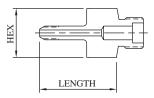
FEMALE M/P CONED AND THREADED TUBE

Connection	Suffix	Hex	Length	Port	MAWP*
1/4" M/P	16	0.75"	0.74"	0.109"	20,000 PSI
1/4 1/1/1	10	(19.1)	(18.8)	(2.8)	1380 bar
3/8" M/P	17	0.75"	1.01"	0.203"	20,000 PSI
3/0 IVI/F	17	(19.1)	(25.7)	(5.2)	1380 bar
9/16" M/P	18	1.00"	1.26"	0.250"	20,000 PSI
9/16 M/P	10	(25.4)	(32.0)	(6.4)	1380 bar



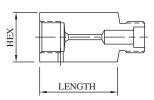
MALE M/P CONED AND THREADED TUBE

Connection	Suffix	Hex	Length	Port	MAWP*
1/4" M/P	8	0.75"	1.88"	0.109"	20,000 PSI
1/4 1/1/1	0	(19.1)	(47.8)	(2.8)	1380 bar
3/8" M/P	10	0.75"	2.00"	0.203"	20,000 PSI
3/8 IVI/F	10	(19.1)	(50.8)	(5.2)	1380 bar
9/16" M/P	10	1.00"	2.31"	0.250"	20,000 PSI
9/10 M/P	11	(25.4)	(58.7)	(6.4)	1380 bar



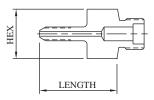
FEMALE H/P CONED AND THREADED TUBE

Connection	Suffix	Hex	Length	Port	MAWP*
1/4" H/P	23	0.75"	1.01"	0.093"	20,000 PSI
1/4 11/1	23	(19.1)	(25.7)	(2.4)	1380 bar
3/8" H/P	24	1.00"	1.17"	0.125"	20,000 PSI
3/6 H/F	24	(25.4)	(29.7)	(3.2)	1380 bar
9/16" H/P	25	1.37"	1.25"	0.187"	20,000 PSI
9/10 H/P	25	(34.8)	(31.8)	(4.7)	1380 bar



MALE H/P CONED AND THREADED TUBE

WHEE BY CONED THE THRESTELD TODE							
Connection	Suffix	Hex	Length	Port	MAWP*		
1/4" H/P	9	0.75"	1.94"	0.083"	20,000 PSI		
1/4 H/F	9	(19.1)	(49.3)	(2.1)	1380 bar		
3/8" H/P	30	0.75"	2.25"	0.125"	20,000 PSI		
3/6 H/F	30	(19.1)	(57.2)	(3.2)	1380 bar		
9/16" H/P	42	0.75"	2.82"	0.187"	20,000 PSI		
9/10 H/P	42	(19.1)	(71.6)	(4.7)	1380 bar		







ADD CONNECTION LENGTHS TO BODY WIDTH

Model No. K104

*MAWP: 10,000 PSI (690 bar) Port: 0.250" (6.4 mm)

Cv: 1.40

Materials of Construction:

- -316 cold-worked stainless steel body and side adapters
- -17-4PH stem
- -PEEK ball seals
- -Glass-filled PTFE stem packings
- -Viton O-rings

Ordering information and options on page BV-2

Repair Kit P/N RK-K104 contains ball, ball seals and seal retainers, o-rings, stem, stem packings, and washers

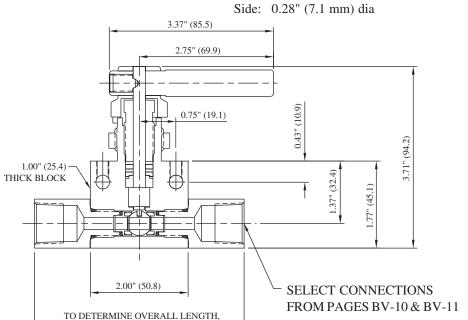
Non-shaded items in-stock and available Shaded items manufactured to order

Mounting:

Panel: 1.06" (26.9 mm) dia

0.43" (11.0 mm) max thickness

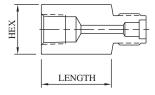
Top: 1/4"-20 UNC



For replacement connections, use prefix number **4-** and suffix number. Ex: 4-20

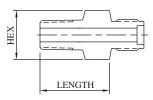
FEMALE PIPE

Connection	Suffix	Hex	Length	Port	MAWP*
1/8" FNPT	19	0.75"	1.03"	0.250"	15,000 PSI
1/6 1/11/1	19	(19.1)	(26.2)	(6.4)	1030 bar
1/4" FNPT	20	0.75"	1.03"	0.250"	15,000 PSI
1/4 1/11/1	20	(19.1)	(26.2)	(6.4)	1030 bar
3/8" FNPT	21	1.38"	1.03"	0.250"	15,000 PSI
3/6 TINE I	21	(35.1)	(26.2)	(6.4)	1030 bar
1/2" FNPT	22	1.38"	1.16"	0.250"	15,000 PSI
1/2 FNF1	22	(35.1)	(29.5)	(6.4)	1030 bar



MALE PIPE

Connection	Suffix	Hex	Length	Port	MAWP*
1/8" MNPT	4	0.75"	1.03"	0.125"	15,000 PSI
1/6 WINF I	-	(19.1)	(26.2)	(3.2)	1030 bar
1/4" MNPT	5	0.75"	1.03"	0.250"	15,000 PSI
1/4 IVIINF I	3	(19.1)	(26.2)	(6.4)	1030 bar
3/8" MNPT	6	0.75"	1.03"	0.250"	15,000 PSI
3/6 WINF I	0	(19.1)	(26.2)	(6.4)	1030 bar
1/2" MNPT	7	1.00"	1.29"	0.250"	15,000 PSI
1/2 WINF I	/	(25.4)	(32.8)	(6.4)	1030 bar





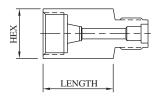


Non-shaded items in-stock and available Shaded items manufactured to order Model No.

K104

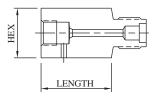
FEMALE SINGLE-FERRULE TUBE

Connection	Suffix	Hex	Length	Port	MAWP*
1/8" L/P	12	0.75"	0.78"	0.093"	15,000 PSI
1/6 L/F	12	(19.1)	(19.8)	(2.4)	1030 bar
1/4" SL/P	13	0.75"	1.03"	0.125"	11,500 PSI
1/4 SL/P	13	(19.1)	(26.2)	0.093" (2.4) 0.125" (3.2) 0.250" (6.4) 0.250"	790 bar
3/8" SL/P	14	0.75"	1.03"	0.250"	7,500 PSI
3/6 SL/F	14	(19.1)	(26.2)	(6.4)	520 bar
1/2" L/P	15	1.00"	1.03"	0.250"	5,500 PSI
1/2 L/P	15	(25.4)	(26.2)	(6.4)	380 bar



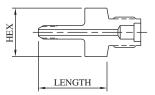
FEMALE M/P CONED AND THREADED TUBE

Connection	Suffix	Hex	Length	Port	MAWP*
1/4" M/P	16	0.75"	1.03"	0.109"	20,000 PSI
1/4 IVI/F	10	(19.1)	(26.2)	(2.8)	1380 bar
3/8" M/P	17	0.75"	1.03"	0.203"	20,000 PSI
3/6 IVI/F	17	(19.1)	(26.2)	(5.2)	1380 bar
9/16" M/P	18	1.00"	1.29"	0.250"	20,000 PSI
9/10 M/P	10	(25.4)	(32.8)	(6.4)	1380 bar



MALE M/P CONED AND THREADED TUBE

Connection	Suffix	Hex	Length	Port	
1/4" M/P	8	0.75"	1.91"	0.109"	20,000 PSI
1/4 1/1/1	0	(19.1)	(48.5)	(2.8)	1380 bar
3/8" M/P	10	0.75"	1.91"	0.203"	20,000 PSI
3/6 WI/F	10	(19.1)	(48.5)	(5.2)	1380 bar
9/16" M/P	11	0.75"	2.12"	0.312"	20,000 PSI
9/10 IVI/F	11	(19.1)	(53.8)	(7.9)	1380 bar







Model No. K106

*MAWP: 10,000 PSI (690 bar) Port: 0.375" (9.5 mm)

Cv: 3.40

Materials of Construction:

- -316 cold-worked stainless steel body and side adapters
- -17-4PH stem
- -PEEK ball seals
- -Glass-filled PTFE stem packings
- -Viton O-rings

Ordering information and options on page BV-2

Repair Kit P/N RK-K106 contains ball, ball seals and seal retainers, o-rings, stem, stem packings, and washers

Non-shaded items in-stock and available Shaded items manufactured to order

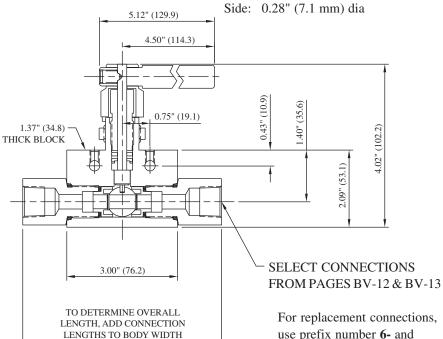
Mounting:

Panel: 1.06" (26.9 mm) dia

0.43" (11.0 mm) max thickness

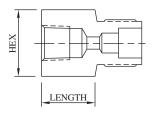
suffix number. Ex: 6-20

Top: 1/4"-20 UNC



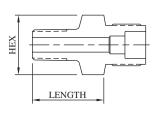
FEMALE PIPE

Connection	Suffix	Hex	Length	Port	MAWP*
1/4" FNPT	20	1.38"	1.08"	0.375"	15,000 PSI
1/4 TINE I	20	(34.9)	(27.4)	(9.5)	1030 bar
3/8" FNPT	21	1.38"	1.02"	0.375"	15,000 PSI
3/6 FINE I	21	(34.9)	(25.9)	(9.5)	1030 bar
1/2" FNPT	22	1.38"	1.21"	0.375"	15,000 PSI
1/2 FINE I	22	(34.9)	(30.7)	(9.5)	1030 bar
3/4" FNPT	41	1.38"	1.33"	0.375"	10,000 PSI
3/4 FNP1	41	(34.9)	(33.8)	(9.5)	690 bar
1" FNPT	45	1.75"	1.62"	0.375"	10,000 PSI
1 FNP1	45	(44.5)	(41.1)	(9.5)	690 bar



MALE PIPE

Connection	Suffix	Hex	Length	Port	MAWP*
1/4" MNPT	5	1.38"	1.41"	0.258"	15,000 PSI
1/4 IVIINT I	3	(35.1)	(35.8)	(6.6)	1030 bar
3/8" MNPT	6	1.38"	1.28"	0.375"	15,000 PSI
J/O WINET	U	(34.9)	(32.5)	(9.5)	1030 bar
1/2" MNPT	7	1.38"	1.33"	0.375"	15,000 PSI
1/2 WINE I	/	(34.9)	(33.8)	(9.5)	1030 bar
3/4" MNPT	55	1.38"	1.60"	0.375"	10,000 PSI
J/4 WINF I	33	(35.1)	(40.6)	(9.5)	690 bar
1" MNPT	56	1.50"	1.91"	0.375"	10,000 PSI
1 WINP1	50	(38.1)	(48.5)	(9.5)	690 bar







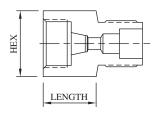
Non-shaded items in-stock and available Shaded items manufactured to order

Model No.

K106

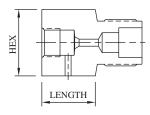
FEMALE SINGLE-FERRULE TUBE

	ENTIRE OF TOPE							
Connection	Suffix	Hex	Length	Port	MAWP*			
1/4" SL/P	13	1.38"	0.66"	0.257"	11,500 PSI			
1/4 SL/F	13	(34.9)	(16.8)	(6.5)	790 bar			
3/8" SL/P	14	1.38"	1.00"	0.312"	7,500 PSI			
3/8 SL/P	14	(34.9)	(25.4)	(7.9)	520 bar			
1/2" L/P	15	1.38"	1.08"	0.375"	5,500 PSI			
1/2 L/P	15	(34.9)	(27.4)	(9.5)	380 bar			



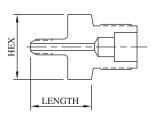
FEMALE M/P CONED AND THREADED TUBE

Connection	Suffix	Hex	Length	Port	MAWP
1/4" M/P	16	1.38"	0.77"	0.109"	20,000 PSI
1/4 1/1/1	10	(35.1)	(19.6)	(2.8)	1380 bar
3/8" M/P	17	1.38"	1.08"	0.203"	20,000 PSI
3/6 IVI/F	17	(35.1)	(27.4)	(5.2)	1380 bar
9/16" M/P	18	1.38"	1.33"	0.312"	20,000 PSI
9/10 IVI/F	10	(35.1)	(33.8)	(7.9)	1380 bar
3/4" M/P	32	1.38"	1.53"	0.375"	20,000 PSI
3/4 IVI/F	32	(35.1)	(38.9)	(9.5)	1380 bar
1" M/P	43	1.75"	1.91"	0.375"	20,000 PSI
1 IVI/P	43	(44.5)	(48.5)	(9.5)	1380 bar



MALE M/P CONED AND THREADED TUBE

Connection	Suffix	Hex	Length	Port	MAWP*
1/4" M/P	8	1.00"	1.89"	0.109"	20,000 PSI
1/4 1/1/1	O	(25.4)	(48.0)	(2.8)	1380 bar
3/8" M/P	10	1.38"	1.90"	0.203"	20,000 PSI
3/6 IVI/P	10	(34.9)	(48.3)	(5.2)	1380 bar
9/16" M/P	11	1.38"	2.13"	0.312"	20,000 PSI
9/10 NI/P	11	(34.9)	(54.1)	(7.9)	1380 bar
3/4" M/P	37	1.38"	5.08"	0.437"	20,000 PSI
3/4 WI/F	37	(34.9)	(129.0)	(11.1)	1380 bar
1" M/D	49	1.38"	3.21"	0.437"	20,000 PSI
1" M/P	49	(35.1)	(81.5)	(11.1)	1380 bar







Model No. KOS108

*MAWP: 10,000 PSI (690 bar) Port: 0.500" (12.7 mm)

Cv: 10.00

Materials of Construction:

- -316 cold-worked stainless steel body and side adapters
- -718 stem
- -PEEK ball seals
- -Glass-filled PTFE stem packings
- -Viton O-rings

Ordering information and options on page BV-2

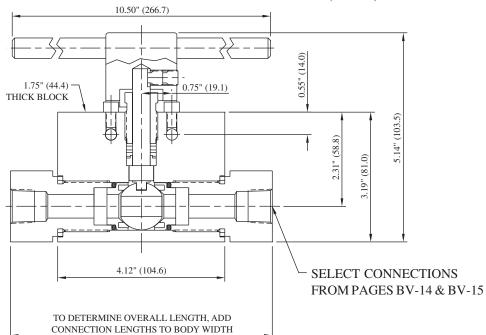
Repair Kit P/N RK-KOS108

contains ball, ball seals and seal retainers, o-rings, stem, stem packings, and washers

Non-shaded items in-stock and available Shaded items manufactured to order

Mounting:

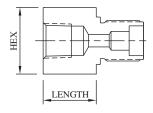
Side: 0.28" (7.1 mm) dia



For replacement connections, use prefix number **381-** and suffix number. Ex: 381-22

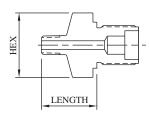
FEMALE PIPE

Connection	Suffix	Hex	Length	Port	MAWP*
3/8" FNPT	21	1.75"	1.00"	0.578"	15,000 PSI
3/6 TIVET	21	(44.5)	(25.4)	(14.7)	1030 bar
1/2" FNPT	22	1.75"	1.17"	0.580"	15,000 PSI
1/2 1/11/1	22	(44.5)	(29.7)	(14.7)	1030 bar
3/4" FNPT	41	1.75"	1.33"	0.580"	10,000 PSI
3/4 FNF1	41	(44.5)	(33.8)	(14.7)	690 bar
1" FNPT	45	1.75"	1.54"	0.580"	10,000 PSI
1 THE	45	(44.5)	(39.1)	(14.7)	690 bar
1-1/2" FNPT	46	2.50"	1.92"	0.580"	3,000 PSI
1-1/2 FINF I	40	(63.5)	(48.8)	(14.7)	340 bar



MALE PIPE

Connection	Suffix	Hex	Length	Port	MAWP*
1/2" MNPT	7	1.75"	1.80"	0.500"	15,000 PSI
1/2 WINT I	,	(44.5)	(45.7)	(12.7)	1030 bar
3/4" MNPT	55	1.75"	1.75"	0.580"	10,000 PSI
3/4 WINT I	33	(44.5)	(44.5)	(14.7)	690 bar
1" MNPT	56	1.75"	1.37"	0.580"	10,000 PSI
1 MINET	50	(44.5)	(34.8)	(14.7)	690 bar
1-1/2" MNPT	121	2.13"	1.92"	0.580"	3,000 PSI
1-1/2 WINF I	121	(54.0)	(48.8)	(14.7)	340 bar





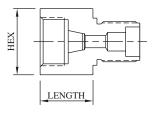


Model No. KOS108

Non-shaded items in-stock and available Shaded items manufactured to order

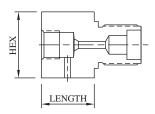
FEMALE COMPRESSION TUBE CONNECTIONS

Connection	Suffix	Hex	Length	Port	MAWP*
3/8" SL/P	14	1.75"	1.00"	0.312"	7,500 PSI
3/6 SL/F	14	(44.5)	(25.4)	(7.9)	520 bar
1/2" L/P	15	1.75"	1.00"	0.438"	5,500 PSI
1/2 L/P	15	(44.5)	(25.4)	(11.1)	380 bar



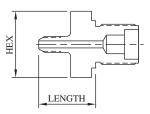
FEMALE M/P CONED AND THREADED TUBE

Connection	Suffix	Hex	Length	Port	MAWP*
9/16" M/P	18	1.75"	1.67"	0.312"	20,000 PSI
9/10 IVI/F	10	(44.5)	(42.4)	(7.9)	1380 bar
3/4" M/P	32	1.75"	1.18"	0.580"	20,000 PSI
3/4 M/P	32	(44.5)	(30.0)	(14.7)	1380 bar
1" M/P	43	1.75"	1.67"	0.580"	20,000 PSI
1 IVI/F	43	(44.5)	(42.4)	(14.7)	1380 bar



MALE M/P CONED AND THREADED TUBE

Connection	Suffix	Hex	Length	Port	MAWP*
3/4" M/P	37	1.75"	2.74"	0.438"	20,000 PSI
3/4 IVI/F	31	(44.5)	(69.6)	(11.1)	1380 bar
1 !! M//D	40	1.75"	2.88"	0.562"	20,000 PSI
1" M/P	49	(44.5)	(73.2)	(14.3)	1380 bar







Model No. **KW204**

*MAWP: 20,000 PSI (1380 bar)

0.250" (6.4 mm) Port:

Cv: 1.40

Materials of Construction:

- -316 cold-worked stainless steel body and side adapters
- -17-4PH stem
- -PEEK ball seals
- -Glass-filled PTFE stem packings
- -Viton O-rings

Ordering information and options on page BV-2

Repair Kit P/N RK-KW204 contains ball, ball seals and seal retainers, o-rings, stem, stem packings, and washers

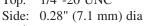
Non-shaded items in-stock and available Shaded items manfactured to order

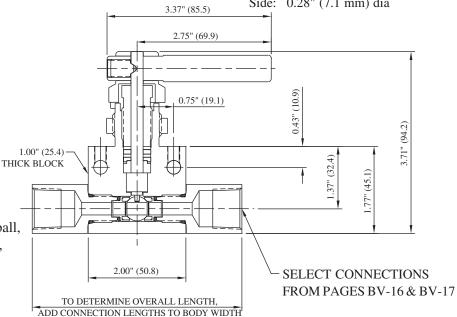
Mounting:

Panel: 1.06" (26.9 mm) dia

0.43" (11.0 mm) max thickness

Top: 1/4"-20 UNC

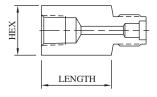




For replacement connections, use prefix number 43- and suffix number. Ex: 43-20

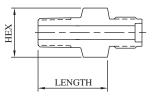
FEMALE PIPE

Connection	Suffix	Hex	Length	Port	MAWP*
1/4" FNPT	20	0.75"	1.03"	0.250"	15,000 PSI
1/4 1/11/1	20	(19.1)	(26.2)	(6.4)	1030 bar
3/8" FNPT	21	1.38"	1.03"	0.250"	15,000 PSI
3/6 FINE I	21	(35.1)	(26.2)	(6.4)	1030 bar
1/2" FNPT	22	1.38"	1.16"	0.250"	15,000 PSI
1/2 FNF1	22	(35.1)	(29.5)	(6.4)	1030 bar



MALE PIPE

Connection	Suffix	Hex	Length	Port	MAWP*
1/4" MNPT	5	0.75"	1.03"	0.250"	15,000 PSI
1/4 MINET	า	(19.1)	(26.2)	(6.4)	1030 bar
3/8" MNPT	6	0.75"	1.03"	0.250"	15,000 PSI
3/6 WINE I	U	(19.1)	(26.2)	(6.4)	1030 bar
1/2" MNPT	7	1.00"	1.29"	0.250"	15,000 PSI
1/2 WINF I	/	(25.4)	(32.8)	(6.4)	1030 bar







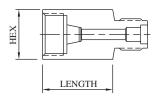
Non-shaded items in-stock and available Shaded items manufactured to order

Model No.

KW204

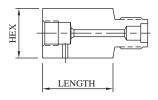
FEMALE SINGLE-FERRULE TUBE

Connection	Suffix	Hex	Length	Port	MAWP*
1/4" SL/P	13	0.75"	1.03"	0.125"	11,500 PSI
1/4 SL/F	13	(19.1)	(26.2)	(3.2)	790 bar
3/8" SL/P	14	0.75"	1.03"	0.250"	7,500 PSI
3/6 SL/F	14	(19.1)	(26.2)	(6.4)	520 bar
1/2" L/P	15	1.00"	1.03"	0.250"	5,500 PSI
1/2 L/F	15	(25.4)	(26.2)	(6.4)	380 bar



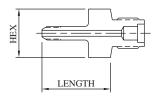
FEMALE M/P CONED AND THREADED TUBE

Connection	Suffix	Hex	Length	Port	MAWP*					
1/4" M/P	16	0.75"	1.03"	0.109"	20,000 PSI					
1/4 IVI/P	16	(19.1)	(26.2)	(2.8)	1380 bar					
3/8" M/P	17	0.75"	1.03"	0.203"	20,000 PSI					
3/8 IVI/P	1/	(19.1)	(26.2)	(5.2)	1380 bar					
9/16" M/P	10	1.00"	1.29"	0.250"	20,000 PSI					
	18	(25.4)	(32.8)	(6.4)	1380 bar					



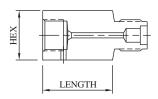
MALE M/P CONED AND THREADED TUBE

Connection	Suffix	Hex	Length	Port	MAWP*					
1/4" M/P	0	0.75"	1.91"	0.109"	20,000 PSI					
1/4 M/P	8	(19.1)	(48.5)	(2.8)	1380 bar					
3/8" M/P	10	0.75"	1.91"	0.203"	20,000 PSI					
3/8 M/P	10	(19.1)	(48.5)	(5.2)	1380 bar					
9/16" M/P	11	0.75"	2.12"	0.312"	20,000 PSI					
	11	(19.1)	(53.8)	(7.9)	1380 bar					



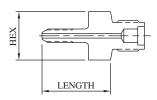
FEMALE H/P CONED AND THREADED TUBE

Connection	Suffix	Hex	Length	Port	MAWP*	
1/4" H/P	23	0.75"	1.03"	0.093"	20,000 PSI	
1/4 H/F	23	(19.1)	(26.2)	(2.4)	1380 bar	
3/8" H/P	24	1.00"	1.03"	0.125"	20,000 PSI	
3/6 H/F	24	(25.4)	(26.2)	(3.2)	1380 bar	
9/16" H/P	25	1.38"	1.16"	0.187"	20,000 PSI	
	25	(34.9)	(29.5)	(4.7)	1380 bar	



MALE H/P CONED AND THREADED TUBE

WHILE IN CONED WIND THRESTOED TODE											
Connection	Suffix	Hex	Length	Port	MAWP*						
1/4" H/P	9	0.75"	1.91"	0.093"	20,000 PSI						
1/4 H/F	9	(19.1)	(48.5)	(2.4)	1380 bar						
3/8" H/P	30	0.75"	2.12"	0.125"	20,000 PSI						
3/8 H/P	30	(19.1)	(53.8)	(3.2)	1380 bar						
9/16" H/P	42	0.75"	2.86"	0.187"	20,000 PSI						
9/10 П/Р	42	(19.1)	(72.6)	(4.7)	1380 bar						







Model No. KW206

*MAWP: 20,000 PSI (1380 bar)

Port: 0.375" (9.5 mm)

Cv: 3.40

Materials of Construction:

- -316 cold-worked stainless steel body and side adapters
- -17-4PH stem
- -PEEK ball seals
- -Glass-filled PTFE stem packings
- -Viton O-rings

Ordering information and options on page BV-2

Repair Kit P/N RK-KW206 contains ball, ball seals and seal retainers, o-rings, stem, stem packings, and washers

Non-shaded items in-stock and available Shaded items manfactured to order

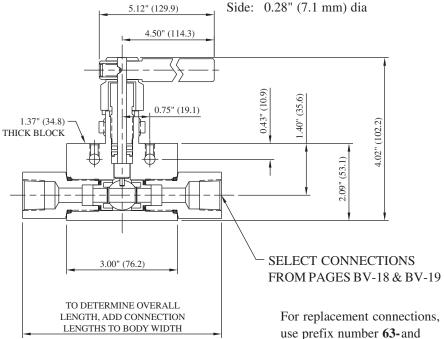
Mounting:

Panel: 1.06" (26.9 mm) dia

0.43" (11.0 mm) max thickness

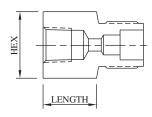
suffix number. Ex: 63-22

Top: 1/4"-20 UNC



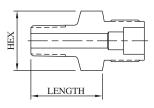
FEMALE PIPE

Connection	Suffix	Hex	Length	Port	MAWP*	
1/4" FNPT	20	1.38"	1.08"	0.375"	15,000 PSI	
1/4 TNF1	20	(34.9)	(27.4)	(9.5)	1030 bar	
3/8" FNPT	21	1.38"	1.02"	0.375"	15,000 PSI	
3/6 FNF1	21	(34.9)	(25.9)	(9.5)	1030 bar	
1/2" FNPT	22	1.38"	1.21"	0.375"	15,000 PSI	
1/2 FNF1	22	(34.9)	(30.7)	(9.5)	1030 bar	
3/4" FNPT	41	1.38"	1.33"	0.375"	10,000 PSI	
3/4 FNF1	41	(34.9)	(33.8)	(9.5)	690 bar	
1" FNPT	45	1.75"	1.62"	0.375"	10,000 PSI	
1 FNF1	45	(44.5)	(41.1)	(9.5)	690 bar	



MALE PIPE

Connection	Suffix	Hex	Length	Port	MAWP*
1/4" MNPT	5	1.38"	1.41"	0.258"	15,000 PSI
1/4 WINF1	3	(35.1)	(35.8)	(6.6)	1030 bar
3/8" MNPT	6	1.38"	1.28"	0.375"	15,000 PSI
3/6 WINET	U	(34.9)	(32.5)	(9.5)	1030 bar
1/2" MNPT	7	1.38"	1.33"	0.375"	15,000 PSI
1/2 WINF I	/	(34.9)	(33.8)	(9.5)	1030 bar
3/4" MNPT	55	1.38"	1.60"	0.375"	10,000 PSI
3/4 WINF1	55	(35.1)	(40.6)	(9.5)	690 bar
1" MNPT	56	1.50"	1.91"	0.375"	10,000 PSI
1 IVIINP I	50	(38.1)	(48.5)	(9.5)	690 bar





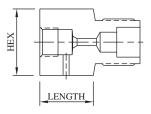


Non-shaded items in-stock and available Shaded items manufactured to order Model No.

KW206

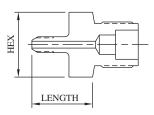
FEMALE M/P CONED AND THREADED TUBE

Connection	Suffix	Hex	Length	Port	MAWP					
1/4" M/P	16	1.38"	0.77"	0.109"	20,000 PSI					
1/4 IVI/F	10	(35.1)	(19.6)	(2.8)	1380 bar					
3/8" M/P	17	1.38"	1.08"	0.203"	20,000 PSI					
3/6 WI/F	17	(35.1)	(27.4)	(5.2)	1380 bar					
9/16" M/P	18	1.38"	1.33"	0.312"	20,000 PSI					
9/10 NI/F	10	(35.1)	(33.8)	(7.9)	1380 bar					
3/4" M/P	32	1.38"	1.53"	0.375"	20,000 PSI					
3/4 WI/F	32	(35.1)	(38.9)	(9.5)	1380 bar					
1" M/P	43	1.75"	1.91"	0.375"	20,000 PSI					
I IVI/P	43	(44.5)	(48.5)	(9.5)	1380 bar					



MALE M/P CONED AND THREADED TUBE

Connection	Suffix	Hex	Length	Port	MAWP*
1/4" M/P	8	1.00"	1.89"	0.109"	20,000 PSI
1/4 1/1/1	0	(25.4)	(48.0)	(2.8)	1380 bar
3/8" M/P	10	1.38"	1.90"	0.203"	20,000 PSI
3/6 WI/F	10	(34.9)	(48.3)	(5.2)	1380 bar
9/16" M/P	11	1.38"	2.13"	0.312"	20,000 PSI
9/10 IVI/F	11	(34.9)	(54.1)	(7.9)	1380 bar
3/4" M/P	37	1.38"	5.08"	0.437"	20,000 PSI
3/4 WI/F	3/	(34.9)	(129.0)	(11.1)	1380 bar
1" M/P	49	1.38"	3.21"	0.437"	20,000 PSI
1 IVI/P	47	(35.1)	(81.5)	(11.1)	1380 bar



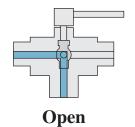




TRUNNION VALVE FLOW CONFIGURATIONS

3-way Diverting P/N 3DVK*

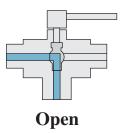
3-way diverting ball valves are designed to divert media from a single source to one of two separate lines. The 90° quarter-turn design allows for continuous on-line service.



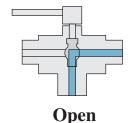


3-way Switching P/N 3K*

3-way switching ball valves are designed to direct media from bottom inlet port to one of two separate lines. The 180° quarter-turn design allows for positive shutoff in the center position.

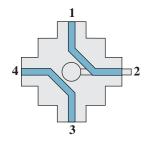


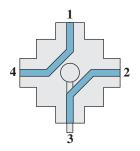




4-way P/N 4K*

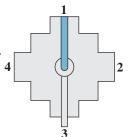
4-way ball valves utilize a double-ported ball for crossover of two flows. The 90° quarter-turn design allows for continuous on-line service. The valve can be used in place of a three valve manifold

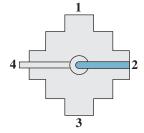


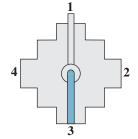


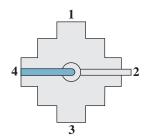
5-way P/N 5K*

5-way ball valves direct media flow from a single bottom inlet to one of four separate lines. The 360° 4 quarter-turn design allows for continuous on-line service.









All BuTech Ball Valves are capable of bi-directional flow.



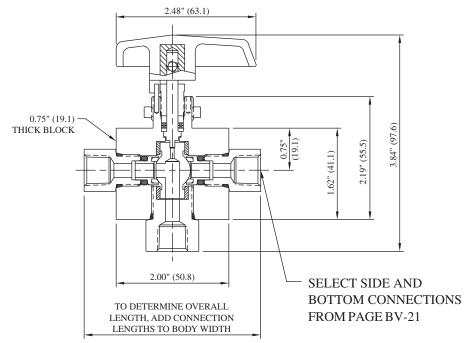


3000 PSI (210 BAR) 3-WAY TRUNNION VALVES

Mounting:

Panel: 0.78" (19.8 mm) dia

0.37" (9.4 mm) max thickness



Non-shaded items in-stock and available Shaded items manufactured to order

FEMALE PIPE

	F	or Side (C <mark>onnecti</mark> o	ons	For Bottom Connection				
Connection	Suffix	Hex	Length	Port	Suffix	Hex	Length	Port	MAWP*
1/8" FNPT	19	0.75"	0.58"	0.250"	19B	0.75"	0.43"	0.250"	15,000 PSI
1/0 1/11/1	17	(19.1)	(14.7)	(6.4)	171	(19.1)	(10.9)	(6.4)	1030 bar
1/4" FNPT	20	0.75"	0.58"	0.250"	20B	0.75"	0.73"	0.250"	15,000 PSI
1/4 FINF1	20	(19.1)	(14.7)	(6.4)	201	(19.1)	(18.5)	(6.4)	1030 bar
3/8" FNPT	21	1.00"	0.75"	0.250"	21B	1.00"	0.81"	0.250"	15,000 PSI
3/8 FNP1	21	(25.4)	(19.1)	(6.4)	21D	(25.4)	(20.6)	(6.4)	1030 bar
1/2" FNPT	22	1.18"	1.00"	0.250"	22B	1.18"	0.96"	0.250"	15,000 PSI
1/2 FINE I	22	(30.0)	(25.4)	(6.4)	22D	(30.0)	(24.4)	(6.4)	1030 bar

Model No. 3K34 3DVK34

*MAWP: 3,000 PSI (210 bar) Port: 0.250" (6.4 mm)

Cv: 1.00

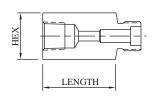
Materials of Construction:

- -316 cold-worked stainless steel body and side adapters
- -316 cold-worked stem
- -PEEK ball seals
- -Glass-filled PTFE stem packings
- -Viton O-rings

Ordering information and options on page BV-2

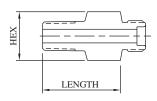
Repair Kit P/N's RK-3K34 and RK-3DVK34 contain trunnion, trunnion seals and seal retainers, o-rings, pins, stem, stem packings, and washers

For replacement connections, use prefix number **40-** and suffix number. Ex: 40-20



MALE PIPE

	F	or Side (Connectio	ns	For Bottom Connection				
Connection	Suffix	Hex	Length	Port	Suffix	Hex	Length	Port	MAWP*
1/8" MNPT	4	0.75"	0.97"	0.250"	4B	0.75"	0.97"	0.250"	15,000 PSI
1/6 WINF I	•	(19.1)	(24.6)	(6.4)	40	(19.1)	(24.6)	(6.4)	1030 bar
1/4" MNPT	5	0.75"	1.19"	0.250"	5B	0.75"	1.19"	0.250"	15,000 PSI
1/4 WINF1	า	(19.1)	(30.2)	(6.4)	ЗВ	(19.1)	(30.2)	(6.4)	1030 bar
3/8" MNPT	6	1.00"	1.30"	0.250"	6B	1.00"	1.30"	0.250"	15,000 PSI
3/8 WINP1	U	(25.4)	(33.0)	(6.4)	OD	(25.4)	(33.0)	(6.4)	1030 bar
1/2" MNPT	7	1.00"	1.55"	0.250"	7B	1.00"	1.55"	0.250"	15,000 PSI
1/2 WINF1	1	(25.4)	(39.4)	(6.4)	/ D	(25.4)	(39.4)	(6.4)	1030 bar







6000 PSI (410 BAR) 3-WAY TRUNNION VALVES

Model No. 3K63 3DVK63

*MAWP: 6,000 PSI (410 bar) Port: 0.187" (4.7 mm)

Cv: 0.56

Materials of Construction:

- -316 cold-worked stainless steel body and side adapters
- -316 cold-worked stem
- -PEEK ball seals
- -Glass-filled PTFE stem packings
- -Viton O-rings

Ordering information and options on page BV-2

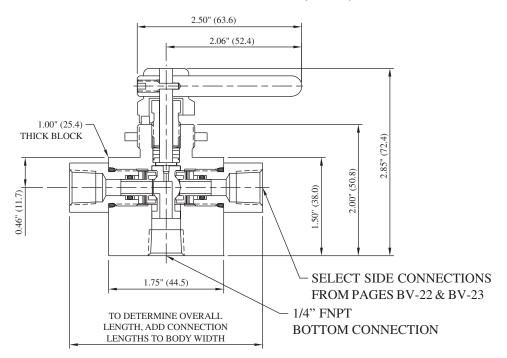
Repair Kit P/N's RK-3K63 and RK-3DVK63 contain trunnion, trunnion seals and seal retainers, o-rings, spring washers, stem, stem packings, and washers

Non-shaded items in-stock and available Shaded items manufactured to order

Mounting:

Panel: 0.91" (23.0 mm) dia

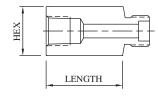
0.31" (7.8 mm) max thickness



For replacement connections, use prefix number **3-** and suffix number. Ex: 3-20

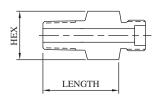
FEMALE PIPE

	F	or Side (Connectio	ns	For Bottom Connection				
Connection	Suffix	Hex	Length	Port	Suffix	Hex	Length	Port	MAWP*
1/8" FNPT	19	0.75"	0.60"	0.250"	19B	1.00"	0.63"	0.250"	15,000 PSI
1/6 FNF1	19	(19.1)	(15.2)	(6.4)	19 D	(25.4)	(16.0)	(6.4)	1030 bar
1/4" FNPT	20	0.75"	0.60"	0.250"	20B	1.00"	0.55"	0.250"	15,000 PSI
1/4 1/11/1	20	(19.1)	(15.2)	(6.4)		(25.4)	(14.0)	(6.4)	1030 bar
3/8" FNPT	21	1.00"	1.01"	0.250"	21B	1.00"	1.01"	0.250"	15,000 PSI
3/0 FNF1	21	(25.4)	(25.7)	(6.4)	21D	(25.4)	(25.7)	(6.4)	1030 bar
1/2" FNPT 22	1.00"	1.01"	0.250"	22B	1.00"	1.16"	0.250"	15,000 PSI	
1/2 1/11/1	22	(25.4)	(25.7)	(6.4)	220	(25.4)	(29.5)	(6.4)	1030 bar



MALE PIPE

	F	or Side (Connectio	ons	Fo				
Connection	Suffix	Hex	Length	Port	Suffix	Hex	Length	Port	MAWP*
1/8" MNPT	4	0.75"	1.01"	0.125"	4B	1.00"	0.93"	0.125"	15,000 PSI
1/6 WINF I	4	(19.1)	(25.7)	(3.2)	4D	(25.4)	(23.6)	(3.2)	1030 bar
1/4" MNPT	5	0.75"	1.01"	0.250"	5B	1.00"	1.05"	0.250"	15,000 PSI
1/4 WINF I	3	(19.1)	(25.7)	(6.4)		(25.4)	(26.7)	(6.4)	1030 bar
3/8" MNPT	6	0.75"	1.01"	0.250"	6B	1.00"	1.01"	0.250"	15,000 PSI
3/6 IVINE I 0	U	(19.1)	(25.7)	(6.4)	OD	(25.4)	(25.7)	(6.4)	1030 bar
1/2" MNPT 7	1.00"	1.26"	0.250"	7B	1.00"	1.29"	0.250"	15,000 PSI	
1/2 IVIINF I	/	(25.4)	(32.0)	(6.4)	/ D	(25.4)	(32.8)	(6.4)	1030 bar







6000 PSI (410 BAR) 3-WAY TRUNNION VALVES

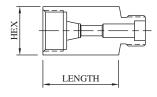
Non-shaded items in-stock and available Shaded items manufactured to order

Model No.

3K63 3DVK63

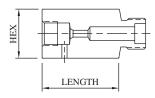
FEMALE SINGLE-FERRULE TUBE

	F	or Side (ns			
Connection	Suffix	Hex	Length	Port	MAWP*	
1/8" L/P	12	0.75"	0.78"	0.093"	15,000 PSI	
1/0 L/1	12	(19.1)	(19.8)	(2.4)	1030 bar	
1/4" SL/P	13	0.75"	1.03"	0.125"	11,500 PSI	
1/4 SL/F	13	(19.1)	(26.2)	(3.2)	790 bar	
3/8" SL/P	14	0.75"	1.03"	0.250"	7,500 PSI	
3/8 SL/P	14	(19.1)	(26.2)	(6.4)	520 bar	
1/2" L/P	15	1.00"	1.03"	0.250"	5,500 PSI	
1/2 L/P		(25.4)	(26.2)	(6.4)	380 bar	



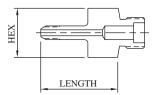
FEMALE $\underline{\text{M/P}}$ CONED AND THREADED TUBE

		F	For Side Connections						
	Connection	Suffix	Hex	Length	Port	MAWP*			
	1/4" M/P	16	0.75"	0.74"	0.109"	20,000 PSI			
	1/4 IVI/P	10	(19.1)	(18.8)	(2.8)	1380 bar			
	3/8" M/P	17	0.75"	1.01"	0.203"	20,000 PSI			
			(19.1)	(25.7)	(5.2)	1380 bar			
	9/16" M/P	18	1.00"	1.26"	0.250"	20,000 PSI			
			(25.4)	(32.0)	(6.4)	1380 bar			



MALE M/P CONED AND THREADED TUBE

	F	or Side (ns		
Connection	Suffix	Hex	Hex Length		MAWP*
1/4" M/P	8	0.75"	1.88"	0.109"	20,000 PSI
1/4 M/P	8	(19.1)	(47.8)	(2.8)	1380 bar
3/8" M/P	10	0.75"	2.00"	0.203"	20,000 PSI
3/6 IVI/P		(19.1)	(50.8)	(5.2)	1380 bar
9/16" M/P	11	1.00"	2.31"	0.250"	20,000 PSI
9/10 M/P		(25.4)	(58.7)	(6.4)	1380 bar



P) of the valve shall not exceed the MAWP of the valve series or the





Model No. 3K93 3DVK93

*MAWP: 10,000 PSI (690 bar) Port: 0.187" (4.7 mm)

Cv: 0.56

Materials of Construction:

- -316 cold-worked stainless steel body and side adapters
- -316 cold-worked stem
- -PEEK ball seals
- -Glass-filled PTFE stem packings
- -Viton O-rings

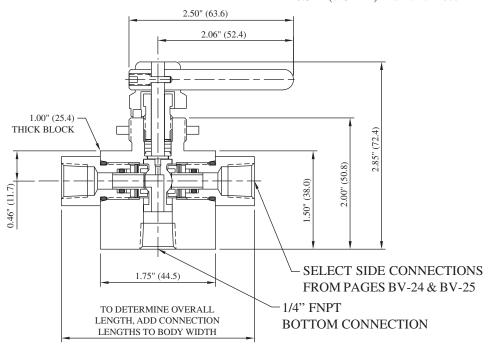
Ordering information and options on page BV-2

Repair Kit P/N's RK-3K93 and RK-3DVK93 contain trunnion, trunnion seals and seal retainers, o-rings, stem, stem packings, and spring washers

Non-shaded items in-stock and available Shaded items manufactured to order

Mounting:

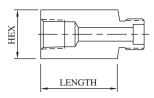
Panel: 0.91" (23.0 mm) dia 0.31" (7.8 mm) max thickness



For replacement connections, use prefix number **3-** and suffix number. Ex: 3-20

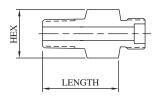
FEMALE PIPE

	F	or Side (Connectio	ns	Fo				
Connection	Suffix	Hex	Length	Port	Suffix	Hex	Length	Port	MAWP*
1/8" FNPT	19	0.75"	0.60"	0.250"	19B	1.00"	0.63"	0.250"	15,000 PSI
	1)	(19.1)	(15.2)	(6.4)	171	(25.4)	(16.0)	(6.4)	1030 bar
1/4" FNPT	20	0.75"	0.60"	0.250"	20B	1.00"	0.55"	0.250"	15,000 PSI
1/4 FNF1	20	(19.1)	(15.2)	(6.4)	20B	(25.4)	(14.0)	(6.4)	1030 bar
3/8" FNPT	21	1.00"	1.01"	0.250"	21B	1.00"	1.01"	0.250"	15,000 PSI
3/8 FNP1	21	(25.4)	(25.7)	(6.4)		(25.4)	(25.7)	(6.4)	1030 bar
1/2" FNPT	22	1.00"	1.01"	0.250"	22B	1.00"	1.16"	0.250"	15,000 PSI
1/2 FINE I	22	(25.4)	(25.7)	(6.4)	22D	(25.4)	(29.5)	(6.4)	1030 bar



MALE PIPE

	F	or Side (Connectio	ns	For Bottom Connection				
Connection	Suffix	Hex	Length	Port	Suffix	Hex	Length	Port	MAWP*
1/8" MNPT	4	0.75"	1.01"	0.125"	4B	1.00"	0.93"	0.125"	15,000 PSI
1/8" MNP1 4	+	(19.1)	(25.7)	(3.2)	4D	(25.4)	(23.6)	(3.2)	1030 bar
1/4" MNPT	5	0.75"	1.01"	0.250"	5B	1.00"	1.05"	0.250"	15,000 PSI
1/4 WINF I	3	(19.1)	(25.7)	(6.4)	эв	(25.4)	(26.7)	(6.4)	1030 bar
3/8" MNPT	6	0.75"	1.01"	0.250"	6B	1.00"	1.01"	0.250"	15,000 PSI
3/8 MINP1	U	(19.1)	(25.7)	(6.4)	OD	(25.4)	(25.7)	(6.4)	1030 bar
1/2" MNPT	7	1.00"	1.26"	0.250"	7B	1.00"	1.29"	0.250"	15,000 PSI
1/2 WINF I	/	(25.4)	(32.0)	(6.4)	7 B	(25.4)	(32.8)	(6.4)	1030 bar







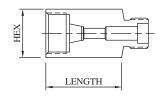
Non-shaded items in-stock and available — Shaded items manufactured to order

Model No.

3K93 3DVK93

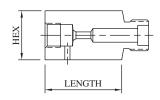
FEMALE SINGLE-FERRULE TUBE

	F	or Side (ns			
Connection	Suffix	Hex	Length	Port	MAWP*	
1/8" L/P	12	0.75"	0.78"	0.093"	15,000 PSI	
1/8 L/P	12	(19.1)	(19.8)	(2.4)	1030 bar	
1/4" SL/P	13	0.75"	1.03"	0.125"	11,500 PSI	
1/4 3L/F		(19.1)	(26.2)	(3.2)	790 bar	
3/8" SL/P	14	0.75"	1.03"	0.250"	7,500 PSI	
3/8 SL/P		(19.1)	(26.2)	(6.4)	520 bar	
1 /0 !! T /D	15	1.00"	1.03"	0.250"	5,500 PSI	
1/2" L/P		(25.4)	(26.2)	(6.4)	380 bar	



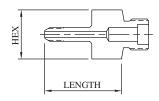
FEMALE M/P CONED AND THREADED TUBE

	F	For Side Connections							
Connection	Suffix	Hex	Length	Port	MAWP*				
1/4" M/P	16	0.75"	0.74"	0.109"	20,000 PSI				
1/4 MI/P	10	(19.1)	(18.8)	(2.8)	1380 bar				
3/8" M/P	17	0.75"	1.01"	0.203"	20,000 PSI				
3/8 M/P		(19.1)	(25.7)	(5.2)	1380 bar				
9/16" M/P	18	1.00"	1.26"	0.250"	20,000 PSI				
		(25.4)	(32.0)	(6.4)	1380 bar				



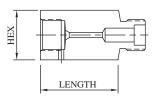
MALE M/P CONED AND THREADED TUBE

	F	or Side (ns		
Connection	Suffix	Hex	Length	Port	MAWP*
1/4" M/P	8	0.75"	1.88"	0.109"	20,000 PSI
1/4 M/P	o	(19.1)	(47.8)	(2.8)	1380 bar
3/8" M/P	10	0.75"	2.00"	0.203"	20,000 PSI
3/8 M/P		(19.1)	(50.8)	(5.2)	1380 bar
9/16" M/P	11	1.00"	2.31"	0.250"	20,000 PSI
		(25.4)	(58.7)	(6.4)	1380 bar



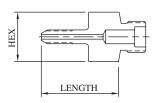
FEMALE H/P CONED AND THREADED TUBE

	F	For Side Connections							
Connection	Suffix	Hex	Length	Port	MAWP*				
1/4" H/P	23	0.75"	1.01"	0.093"	20,000 PSI				
1/4 11/1	23	(19.1)	(25.7)	(2.4)	1380 bar				
3/8" H/P	24	1.00"	1.17"	0.125"	20,000 PSI				
3/6 11/1		(25.4)	(29.7)	(3.2)	1380 bar				
9/16" H/P	25	1.37"	1.25"	0.187"	20,000 PSI				
		(34.8)	(31.8)	(4.7)	1380 bar				



MALE H/P CONED AND THREADED TUBE

	F	or Side (ns		
Connection	Suffix	Hex	Length	Port	MAWP*
1/4" H/P	9	0.75"	1.94"	0.083"	20,000 PSI
1/4 H/P	9	(19.1)	(49.3)	(2.1)	1380 bar
3/8" H/P	30	0.75"	2.25"	0.125"	20,000 PSI
3/6 11/1		(19.1)	(57.2)	(3.2)	1380 bar
9/16" H/P	42	0.75"	2.82"	0.187"	20,000 PSI
9/16 H/P		(19.1)	(71.6)	(4.7)	1380 bar







LENGTH, ADD CONNECTION

LENGTHS TO BODY WIDTH

Model No. 3K106 3DVK106

*MAWP: 10,000 PSI (690 bar) Port: 0.375" (9.5 mm)

Cv: 2.40

Materials of Construction:

- -316 cold-worked stainless steel body and side adapters
- -17-4PH stem
- -PEEK ball seals
- -Viton O-rings
- -PTFE back-ups

Ordering information and options on page BV-2

Repair Kit P/N's RK-3K106 and RK-3DVK106 contain stem, trunnion, trunnion seals and seal retainers, o-rings, backups, spring washers, and bearing washers

Non-shaded items in-stock and available Shaded items manufactured to order

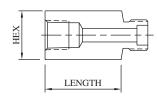
Panel: 1.06" (26.9 mm) dia 0.25" (6.3 mm) max thickness Side: 0.28" (7.1 mm) dia 1.75" (44.45) THICK BLOCK SELECT SIDE AND BOTTOM CONNECTIONS FROM PAGES BV-26 & BV-27

Mounting:

For replacement connections, use prefix number **36-** and suffix number. Ex: 36-20

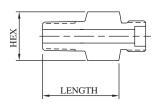
FEMALE PIPE

	F	or Side (Connectio	ns	For Bottom Connection				
Connection	Suffix	Hex	Length	Port	Suffix	Hex	Length	Port	MAWP*
1/4" FNPT	20	1.38"	1.00"	0.437"	20B	1.38"	1.06"	0.375"	15,000 PSI
1/4 TINE 1 20	20	(35.1)	(25.4)	(11.1)	200	(35.1)	(26.9)	(9.5)	1030 bar
3/8" FNPT	21	1.38"	1.00"	0.500"	21B	1.38"	1.06"	0.375"	15,000 PSI
3/0 FNF1	21	(35.1)	(25.4)	(12.7)	21B	(35.1)	(26.9)	(9.5)	1030 bar
1/2" FNPT	22	1.38"	1.00"	0.500"	22B	1.38"	1.06"	0.375"	15,000 PSI
1/2 1/11/1	22	(35.1)	(25.4)	(12.7)	22D	(35.1)	(26.9)	(9.5)	1030 bar
3/4" FNPT	41	1.38"	1.10"	0.500"	41B	1.38"	1.17"	0.375"	10,000 PSI
3/4 TNF1	41	(35.1)	(27.9)	(12.7)	410	(35.1)	(29.7)	(9.5)	690 bar
1" FNPT	45	1.75"	1.75"	0.500"	45B	1.75"	1.75"	0.500"	10,000 PSI
I FINE I	43	(44.5)	(44.5)	(12.7)	43D	(44.5)	(44.5)	(12.7)	690 bar



MALE PIPE

	F	or Side (Connectio	ons	Fo				
Connection	Suffix	Hex	Length	Port	Suffix	Hex	Length	Port	MAWP*
1/4" MNPT	5	1.38"	1.22"	0.250"	5B	1.38"	1.31"	0.250"	15,000 PSI
1/4 WINP1 3	3	(35.1)	(31.0)	(6.4)	ЗВ	(35.1)	(33.3)	(6.4)	1030 bar
3/8" MNPT	6	1.38"	1.23"	0.375"	6B	1.38"	1.43"	0.375"	15,000 PSI
3/6 WINT I	U	(35.1)	(31.2)	(9.5)	OD	(35.1)	(36.3)	(9.5)	1030 bar
1/2" MNPT	7	1.38"	1.59"	0.375"	7B	1.38"	1.63"	0.375"	15,000 PSI
1/2 WINT 1	,	(35.1)	(40.4)	(9.5)	7.13	(35.1)	(41.4)	(9.5)	1030 bar
3/4" MNPT	55	1.38"	1.62"	0.500"	55B	1.38"	1.65"	0.375"	10,000 PSI
3/4 WINF I	33	(35.1)	(41.1)	(12.7)	331	(35.1)	(41.9)	(9.5)	690 bar
1" MNPT 5	56	1.50"	1.87"	0.500"	56B	1.50"	1.90"	0.375"	10,000 PSI
1 WINT 1	30	(38.1)	(47.5)	(12.7)	301	(38.1)	(48.3)	(9.5)	690 bar





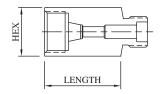


Non-shaded items in-stock and available — Shaded items manufactured to order

FEMALE SINGLE-FERRULE TUBE

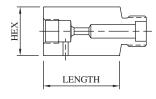
	ons	Fo	tion						
Connection	Suffix	Hex	Length	Port	Suffix	Hex	Length	Port	MAWP*
1/4" SL/P	13	1.38"	0.64"	0.187"	13B	1.38"	0.66"	0.187"	11,500 PSI
1/4 SL/F	13	(35.1)	(16.3)	(4.7)	136	(35.1)	(16.8)	(4.7)	790 bar
3/8" SL/P	14	1.38"	0.75"	0.312"	14B	1.38"	0.75"	0.312"	7,500 PSI
3/6 SL/F	14	(35.1)	(19.1)	(7.9)		(35.1)	(19.1)	(7.9)	520 bar
1/2" L/P	15	1.38"	1.06"	0.437"	15B	1.38"	1.06"	0.375"	5,500 PSI
1/2 L/P	15	(35.1)	(26.9)	(11.1)		(35.1)	(26.9)	(9.5)	380 bar

Model No. 3K106 3DVK106



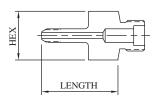
FEMALE M/P CONED AND THREADED TUBE

	F	or Side (Connectio	ons	Fo	tion			
Connection	Suffix	Hex	Length	Port	Suffix	Hex	Length	Port	MAWP*
1/4" M/P	16	1.38"	0.65"	0.109"	16B	1.38"	0.72"	0.109"	20,000 PSI
1/4 1/1/1	10	(35.1)	(16.5)	(2.8)	101	(35.1)	(18.3)	(2.8)	1380 bar
3/8" M/P	17	1.38"	1.06"	0.203"	17B	1.38"	1.06"	0.203"	20,000 PSI
3/6 IVI/I	3/8° M/P 17 (35.1)	(26.9)	(5.2)	1/B	(35.1)	(26.9)	(5.2)	1380 bar	
9/16" M/P	18	1.38"	1.31"	0.312"	18B	1.38"	1.06"	0.312"	20,000 PSI
9/10 IVI/F		(35.1)	(33.3)	(7.9)		(35.1)	(26.9)	(7.9)	1380 bar
3/4" M/P	32	1.38"	1.52"	0.437"	32R	1.38"	1.18"	0.375"	20,000 PSI
3/4 IVI/I	32	(35.1)	(38.6)	(11.1)	32B	(35.1)	(30.0)	(9.5)	1380 bar
1" M/P	43	1.75"	1.91"	0.500"	42D	1.75"	1.99"	0.375"	20,000 PSI
1 IVI/P	1" M/P 43 (44.5) (48.5) (12.7) 43B	43B	(44.5)	(50.5)	(9.5)	1380 bar			



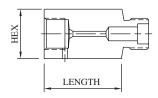
MALE M/P CONED AND THREADED TUBE

	F	or Side (Connectio	ns	Fo	tion			
Connection	Suffix	Hex	Length	Port	Suffix	Hex	Length	Port	MAWP*
1/4" M/P	8	1.38"	1.91"	0.109"	8B	1.38"	1.93"	0.109"	20,000 PSI
1/4 1/1/1	0	(35.1)	(48.5)	(2.8)	ов	(35.1)	(49.0)	(2.8)	1380 bar
3/8" M/P	10	1.38"	1.87"	0.203"	10B	1.38"	2.17"	0.203"	20,000 PSI
3/6 IVI/I	10	(35.1)	(47.5)	(5.2)	10B	(35.1)	(55.1)	(5.2)	1380 bar
9/16" M/P	11	1.38"	3.21"	0.312"	11B	1.38"	2.18"	0.312"	20,000 PSI
9/10 IVI/F	11	(35.1)	(81.5)	(7.9)	1110	(35.1)	(55.4)	(7.9)	1380 bar
3/4" M/P	37	1.38"	3.54"	0.437"	37B	1.38"	5.06"	0.437"	20,000 PSI
3/4 IVI/I	31	(35.1)	(89.9)	(11.1)	3/10	(35.1)	(128.5)	(11.1)	1380 bar
1" M/P	40	1.38"	3.20"	0.500"	40P	1.38"	3.25"	0.500"	20,000 PSI
1 1/1/1	49	(35.1)	(81.3)	(12.7)	49B	(35.1)	(82.6)	(12.7)	1380 bar



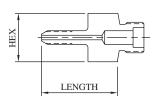
FEMALE H/P CONED AND THREADED TUBE

	F	or Side (Connectio	ons	Fo	tion			
Connection Suffix Hex		Hex	Length	Port	Port Suffix		Length	Port	MAWP*
1/4" H/P	23	1.38"	0.58"	0.093"	23B	1.38"	0.60"	0.093"	20,000 PSI
1/4 11/1	23	(35.1)	(14.7) (2.4)	(35.1)	(15.2)	(2.4)	1380 bar		
3/8" H/P	24	1.38"	0.89"	0.125"	24D	1.38"	0.91"	0.125"	20,000 PSI
3/6 H/P	24	(35.1)	(22.6)	(3.2)	24B	(35.1)	(23.1)	(3.2)	1380 bar
9/16" H/P	25	1.50"	0.98"	0.187"	25B	1.50"	1.02"	0.187"	20,000 PSI
9/10 H/P	45	(38.1)	(24.9)	(4.7)	23B	(38.1)	(25.9)	(4.7)	1380 bar



MALE H/P CONED AND THREADED TUBE

	F	or Side (Connectio	ns	Fo	tion			
Connection	Suffix	Hex	Length	Port	Suffix	Hex	Length	Port	MAWP*
1/4" H/P	9	1.38"	2.16"	0.083"	9B	1.38"	2.19"	0.083"	20,000 PSI
1/4 H/P	9	(35.1)	(54.9)	(2.1)	98	(35.1)	(55.6)	(2.1)	1380 bar
3/8" H/P	30	1.38"	2.40"	0.125"	30B	1.38"	2.42"	0.125"	20,000 PSI
3/6 H/P	30	(35.1)	(61.0)	(3.2)	301	(35.1)	(61.5)	(3.2)	1380 bar
9/16" H/P	42	1.38"	2.89"	0.187"	42B	1.38"	2.92"	0.187"	20,000 PSI
9/10 H/P	" H/P 42	(35.1)	(73.4)	(4.7)	42B	(35.1)	(74.2)	(4.7)	1380 bar







Model No. 3KOS108 3DVKOS108

*MAWP: 10,000 PSI (690 bar) Port: 0.500" (12.7 mm)

Cv: 5.00

Materials of Construction:

- -316 cold-worked stainless steel body and side adapters
- -718 stem
- -PEEK ball seals
- -Glass-filled PTFE stem packings
- -Viton O-rings

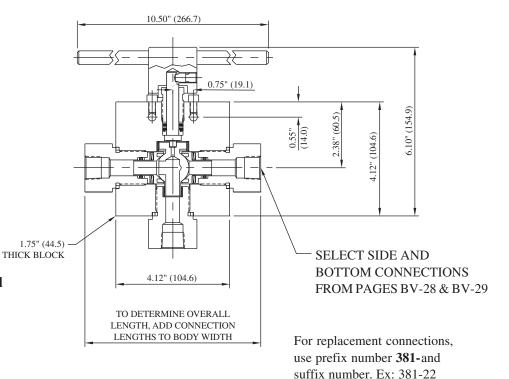
Ordering information and options on page BV-2

Repair Kit P/N's RK-3KOS108 and RK-3DVK0S108 contain trunnion, trunnion seals and seal retainers, o-rings, spring washers, stem, stem packings and washers

Non-shaded items in-stock and available Shaded items manufactured to order

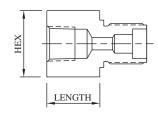
Mounting:

Side: 0.28" (7.1 mm) dia



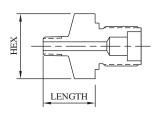
FEMALE PIPE

	1	For Side (Connection	ns	F	or Botton	n Connect	ion	
Connection	Suffix	Hex	Length	Port	Suffix	Hex	Length	Port	MAWP*
3/8" FNPT	21	1.75"	1.11"	0.437"	21B	1.75"	1.19"	0.437"	15,000 PSI
3/0 FNF1	21	(44.5)	(28.2)	(11.1)	210	(44.5)	(30.2)	(11.1)	1030 bar
1/2" FNPT	22	1.75"	1.11"	0.580"	22B	1.75"	1.19"	0.500"	15,000 PSI
1/2 1/11/1	22	(44.5)	(28.2)	(14.7)	22B	(44.5)	(30.2)	(12.7)	1030 bar
3/4" FNPT	41	1.75"	1.21"	0.580"	/1R	1.75"	1.33"	0.500"	10,000 PSI
3/4 11111	71	(44.5)	(30.7)	(14.7)	41B	(44.5)	(33.8)	(12.7)	690 bar
1" FNPT	45	1.75"	1.37"	0.580"	45B	1.75"	1.70"	0.500"	10,000 PSI
1 11111	73	(44.5)	(34.8)	(14.7)	430	(44.5)	(43.2)	(12.7)	690 bar
1-1/2" FNPT	46	2.50"	1.75"	0.580"	46B	2.50"	1.75"	0.500"	3,000 PSI
1-1/2 1111 1	40	(63.5)	(44.5)	(14.7)	40D	(63.5)	(44.5)	(12.7)	340 bar



MALE PIPE

	F	or Side (Connectio	ons	Fo	tion			
Connection	Suffix	Hex	Length	Port	Suffix	Hex	Length	Port	MAWP*
3/8" MNPT	6	1.75"	1.43"	0.375"	6B	1.75"	1.43"	0.375"	15,000 PSI
3/6 WINF I	U	(44.5)	(36.3)	(9.5)	OD	(44.5)	(36.3)	(9.5)	1030 bar
1/2" MNPT	7	1.75"	1.65"	0.580"	7B	1.75"	1.67"	0.500"	15,000 PSI
1/2 WINF I	,	(44.5)	(41.9)	(14.7)	7.13	(44.5)	(42.4)	(12.7)	1030 bar
3/4" MNPT	55	1.75"	1.67"	0.580"	55B	1.75"	1.75"	0.500"	10,000 PSI
3/4 WINT I	33	(44.5)	(42.4)	(14.7)	33 D	(44.5)	(44.5)	(12.7)	690 bar
1" MNDT	56	1.75"	1.85"	0.580"	56B	1.75"	1.86"	0.500"	10,000 PSI
1" MNPT	30	(44.5)	(47.0)	(14.7)	301	(44.5)	(47.2)	(12.7)	690 bar
1-1/2" MNPT 12	121	2.12"	1.89"	0.580"	121R	2.12"	1.89"	0.500"	3,000 PSI
	121	(53.8)	(48.0)	(14.7)	121B	(53.8)	(48.0)	(12.7)	340 bar





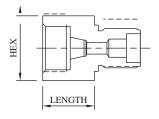


Non-shaded items in-stock and available Shaded items manufactured to order

Model No. 3KOS108 3DVKOS108

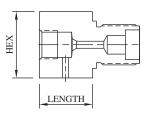
FEMALE SINGLE-FERRULE TUBE

	F	or Side (Connectio	ns	Fo	tion			
Connection	Suffix	Hex	Length	Port	Suffix	Hex	Length	Port	MAWP*
3/8" SL/P	14	1.75"	1.12"	0.312"	14B	1.75"	1.08"	0.312"	7,500 PSI
3/6 SL/F	14	(44.5)	(28.4)	(7.9)	14B	(44.5)	(27.4)	(7.9)	520 bar
1/2" L/P	15	1.75"	1.00"	0.437"	15D	1.75"	1.00"	0.437"	5,500 PSI
1/2 L/P	15	(44.5)	(25.4)	(11.1)	15B	(44.5)	(25.4)	(11.1)	380 bar



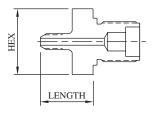
FEMALE M/P CONED AND THREADED TUBE

	F	or Side (Connectio	ns	Fo	tion			
Connection	Suffix	Hex	Length	Port	Suffix	Hex	Length	Port	MAWP*
9/16" M/P	18		0.94"	0.312"	10D	1.75"	0.94"	0.312"	20,000 PSI
9/10 M/P	10	(44.5)	(23.9)	(7.9)	18B	(44.5)	(23.9)	(7.9)	1380 bar
3/4" M/P	32	1.75"	1.36"	0.515"	32P	1.75"	0.89"	0.500"	20,000 PSI
3/4 WI/F	32	(44.5)	(34.5)	(13.1)	32B	(44.5)	(22.6)	(12.7)	1380 bar
1" M/P	43	1.75"	1.66"	0.562"	43B	1.75"	1.74"	0.500"	20,000 PSI
1 IVI/P	43	(44.5)	(42.2)	(14.3)	43D	(44.5)	(44.2)	(12.7)	1380 bar



MALE M/P CONED AND THREADED TUBE

	F	or Side (Connectio	ons	Fo	ion			
Connection	Suffix	Hex	Length	Port	Suffix	Hex	Length	Port	MAWP*
9/16" M/P	11	1.75"	2.64"	0.312"	11D	1.75"	2.64"	0.312"	20,000 PSI
9/10 IVI/P	11	(44.5)	(67.1)	(7.9)	11B	(44.5)	(67.1)	(7.9)	1380 bar
3/4" M/P	/P 37	1.75"	2.75"	0.437"	37B	1.75"	2.75"	0.437"	20,000 PSI
3/4 IVI/F		(44.5)	(69.9)	(11.1)	3/15	(44.5)	(69.9)	(11.1)	1380 bar
1" M/P	49	1.75"	3.21"	0.580"	49B	1.75"	3.21"	0.500"	20,000 PSI
1 IVI/P	49	(44.5)	(81.5)	(14.7)	43D	(44.5)	(81.5)	(12.7)	1380 bar







Model No. 3K123 3DVK123

*MAWP: 12,000 PSI (830 bar) Port: 0.187" (4.7 mm)

Cv: 0.56

Materials of Construction:

- -316 cold-worked stainless steel body and side adapters
- -17-4PH stem
- -PEEK ball seals
- -Viton O-rings
- -PTFE back-ups

Ordering information and options on page BV-2

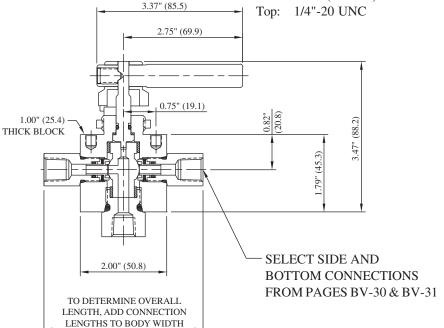
Repair Kit P/N's RK-3K123 and RK-3DVK123 contain stem, trunnion, trunnion seals and seal retainers, o-rings, backups, spring washers, and bearing washers

Non-shaded items in-stock and available Shaded items manufactured to order

Mounting:

Panel: 1.06" (26.9 mm) dia

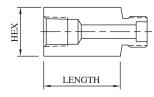
0.25" (6.4 mm) max thickness



For replacement connections, use prefix number **3-** and suffix number. Ex: 3-20

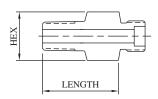
FEMALE PIPE

	F	or Side (Connectio	ns	Fo	tion			
Connection	onnection Suffix Hex Length Port					Hex	Length	Port	MAWP*
1/8" FNPT	19	0.75"	0.60"	0.250"	19B	1.00"	0.63"	0.250"	15,000 PSI
1/6 11111	19	(19.1)	(15.2)	(6.4)	171	(25.4)	(16.0)	(6.4)	1030 bar
1/4" FNPT	20	0.75"	0.60"	0.250"	20B	1.00"	0.55"	0.250"	15,000 PSI
1/4 1/11/1	20	(19.1)	(15.2)	(6.4)	20B	(25.4)	(14.0)	(6.4)	1030 bar
3/8" FNPT	21	1.00"	1.01"	0.250"	21B	1.00"	1.01"	0.250"	15,000 PSI
3/6 1111	21	(25.4)	(25.7)	(6.4)	21D	(25.4)	(25.7)	(6.4)	1030 bar
1/2" FNPT	22	1.00"	1.01"	0.250"	22B	1.00"	1.16"	0.250"	15,000 PSI
1/2 FINE I	FNP1 22 (25.4)	(25.7)	(6.4)	228	(25.4)	(29.5)	(6.4)	1030 bar	



MALE PIPE

	F	or Side (Connectio	ons	Fo	tion			
Connection	Suffix	Hex	Length	Port	Suffix	Hex	Length	Port	MAWP*
1/8" MNPT	4	0.75"	1.01"	0.125"	4B	1.00"	0.93"	0.125"	15,000 PSI
1/6 WINE I	+	(19.1)	(25.7)	(3.2)	40	(25.4)	(23.6)	(3.2)	1030 bar
1/4" MNPT	5	0.75" 1.01" 0.250" 5B	5 D	1.00"	1.05"	0.250"	15,000 PSI		
1/4 WINF I	3	(19.1)	(25.7)	(6.4)	ЭВ	(25.4)	(26.7)	(6.4)	1030 bar
2/9" MNDT	6	0.75"	1.01"	0.250"	6P	1.00"	1.01"	0.250"	15,000 PSI
3/8" MNPT	6	(19.1)	(25.7)	(6.4)	6B	(25.4)	(25.7)	(6.4)	1030 bar
1/2" MNPT	7	1.00"	1.26"	0.250"	7D	1.00"	1.29"	0.250"	15,000 PSI
	7	(25.4)	(32.0)	(6.4)	7B	(25.4)	(32.8)	(6.4)	1030 bar





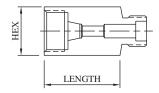


Non-shaded items in-stock and available — Shaded items manufactured to order

FEMALE SINGLE-FERRULE TUBE

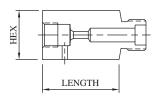
	F	or Side (Connectio	ns	Fo	tion			
Connection	Suffix	Hex	Length	Port	Suffix	Hex	Length	Port	MAWP*
1/8" L/P	12	0.75"	0.78"	0.093"	12B	1.00"	0.55"	0.093"	15,000 PSI
1/6 L/F	12	(19.1)	(19.8)	(2.4)	120	(25.4)	(14.0)	(2.4)	1030 bar
1/4" SL/P	13	0.75"	1.03"	0.125"	13B	1.00"	0.83"	0.125"	11,500 PSI
1/4 SL/F	13	(19.1)	(26.2)	(3.2)	136	(25.4)	(21.0)	(3.2)	790 bar
3/8" SL/P	14	0.75"	1.03"	0.250"	14B	1.00"	1.01"	0.250"	7,500 PSI
3/6 SL/F	14	(19.1)	(26.2)	(6.4)	140	(25.4)	(25.7)	(6.4)	520 bar
1/2" L/P	15	1.00"	1.03"	0.250"	15B	1.00"	1.01"	0.250"	5,500 PSI
1/2 L/P	15	(25.4)	(26.2)	(6.4)	13D	(25.4)	(25.7)	(6.4)	380 bar

Model No. 3K123 3DVK123



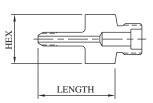
FEMALE M/P CONED AND THREADED TUBE

	F	or Side (Connectio	ons	Fo	tion			
Connection	Suffix	Hex	Length	Port	Suffix	Hex	Length	Port	MAWP*
1/4" M/P	16	0.75"	0.74"	0.109"	16B	1.00"	0.76"	0.109"	20,000 PSI
1/4 IVI/F	10	(19.1)	(18.8)	(2.8)	10D	(25.4)	(19.3)	(2.8)	1380 bar
3/8" M/P	17	0.75"	1.01"	0.203"	17B	1.00"	0.83"	0.203"	20,000 PSI
3/6 WI/F	17	(19.1)	(25.7)	(5.2)	1/1	(25.4)	(21.0)	(5.2)	1380 bar
9/16" M/P	18	1.00"	1.26"	0.250"	18B	1.00"	1.01"	0.312"	20,000 PSI
9/10 IVI/F	10	(25.4)	(32.0)	(6.4)	10D	(25.4)	(25.7)	(7.9)	1380 bar



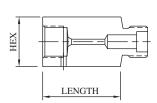
MALE M/P CONED AND THREADED TUBE

	F	or Side (Connectio	ns	Fo	tion			
Connection	Suffix	Hex	Length	Port	Suffix	Hex	Length	Port	MAWP*
1/4" M/P	8	0.75"	1.88"	0.109"	8B	1.00"	1.88"	0.109"	20,000 PSI
1/4 IVI/P	0	(19.1)	(47.8)	(2.8)	8D	(25.4)	(47.8)	(2.8)	1380 bar
3/8" M/P	10	0.75"	2.00"	0.203"	10B	1.00"	2.00"	0.203"	20,000 PSI
3/8 IVI/P	10	(19.1)	(50.8)	(5.2)	100	(25.4)	(50.8)	(5.2)	1380 bar
9/16" M/P	11	1.00"	2.31"	0.250"	11B	1.12"	2.95"	0.312"	20,000 PSI
9/10 WI/F	11	(25.4)	(58.7)	(6.4)	1110	(28.4)	(74.9)	(7.9)	1380 bar



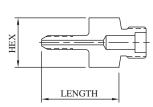
FEMALE H/P CONED AND THREADED TUBE

	F	or Side (Connectio	ons	Fo	tion			
Connection	Suffix	Hex	Length	Port	Suffix	Hex	Length	Port	MAWP*
1/4" H/P	23	0.75"	1.01"	0.093"	23B	1.00"	0.89"	0.093"	20,000 PSI
1/4 П/Р	23	(19.1)	(25.7)	(2.4)	23B	(25.4)	(22.6)	(2.4)	1380 bar
3/8" H/P	24	1.00"	1.17"	0.125"	24B	1.00"	0.99"	0.125"	20,000 PSI
3/6 H/F	24	(25.4)	(29.7)	(3.2)	24D	(25.4)	(25.1)	(3.2)	1380 bar
9/16" H/P	25	1.37"	1.25"	0.187"	25B	1.37"	1.25"	0.187"	20,000 PSI
9/10 П/F	25	(34.8)	(31.8)	(4.7)	23B	(34.8)	(31.8)	(4.7)	1380 bar



MALE H/P CONED AND THREADED TUBE

	F	or Side (Connectio	ons	Fo	tion			
Connection	Suffix	Hex	Length	Port	Suffix	Hex	Length	Port	MAWP*
1/4" H/P	9	0.75"	1.94"	0.083"	9B	1.00"	2.12"	0.083"	20,000 PSI
1/4 11/1	9	(19.1)	(49.3)	(2.1)	ЭD	(25.4)	(53.8)	(2.1)	1380 bar
3/8" H/P	30	0.75"	2.25"	0.125"	30B	1.00"	2.35"	0.125"	20,000 PSI
3/6 П/Г	30	(19.1)	(57.2)	(3.2)	SUD	(25.4)	(59.7)	(3.2)	1380 bar
9/16" H/P	42	0.75"	2.82"	0.187"	42B	1.00"	2.88"	0.187"	20,000 PSI
9/10 П/Р	42	(19.1)	(71.6)	(4.7)	42D	(25.4)	(73.2)	(4.7)	1380 bar







Model No. 3K203 3DVK203

*MAWP: 20,000 PSI (1380 bar)

Port: 0.187" (4.7 mm)

Cv: 0.56

Materials of Construction:

- -316 cold-worked stainless steel body and side adapters
- -17-4PH stem
- -PEEK ball seals
- -Viton O-rings
- -PTFE back-ups

Ordering information and options on page BV-2

Repair Kit P/N's RK-3K203 and RK-3DVK203 contain stem, trunnion, trunnion seals and seal retainers, o-rings, backups, spring washers, and bearing washers

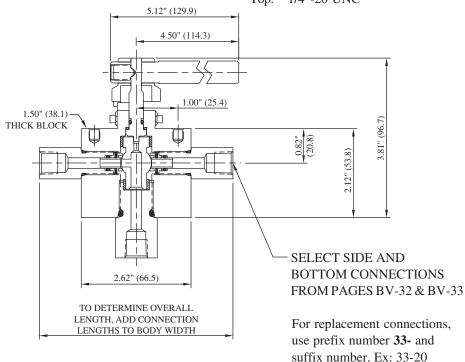
Non-shaded items in-stock and available Shaded items manufactured to order

Mounting:

Panel: 1.06" (26.9 mm) dia

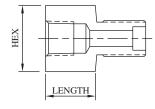
0.25" (6.4 mm) max thickness

Top: 1/4"-20 UNC



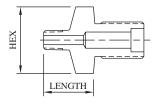
FEMALE PIPE

	F	or Side (Connectio	ons	Fo	tion			
Connection	Suffix	Hex	Length	Port	Suffix	Hex	Length	Port	MAWP*
1/4" FNPT	20	0.75"	1.00"	0.250"	20B	1.00"	1.06"	0.250"	15,000 PSI
1/4 1/11/1	20	(19.1)	(25.4)	(6.4)	20D	(25.4)	(26.9)	(6.4)	1030 bar
3/8" FNPT	21	1.00"	1.01"	0.250"	21B	1.00"	1.06"	0.250"	15,000 PSI
3/0 TNF1	21	(25.4)	(25.7)	(6.4)	21D	(25.4)	(26.9)	(6.4)	1030 bar
1/2" FNPT	22	1.38"	1.13"	0.250"	22B	1.37"	1.12"	0.250"	15,000 PSI
1/2 FNF1	22	(35.1)	(28.7)	(6.4)	22D	(34.8)	(28.4)	(6.4)	1030 bar



MALE PIPE

	F	or Side (Connectio	ns	Fo	tion			
Connection	Suffix	Hex	Length	Port	Suffix	Hex	Length	Port	MAWP*
1/4" MNPT	5	0.75"	1.25"	0.250"	5B	1.00"	1.08"	0.250"	15,000 PSI
1/4 IVIINF I	3	(19.1)	(31.8)	(6.4)	3B	(25.4)	(27.4)	(6.4)	1030 bar
3/8" MNPT	6	0.75"	1.25"	0.250"	6B	1.00"	1.30"	0.250"	15,000 PSI
3/6 IVIINE I	U	(19.1)	(31.8)	(6.4)	OD	(25.4)	(33.0)	(6.4)	1030 bar
1/2" MNPT	7	1.00"	1.60"	0.250"	7B	1.00"	1.52"	0.250"	15,000 PSI
1/2 WINP1	/	(25.4)	(40.6)	(6.4)	/ D	(25.4)	(38.6)	(6.4)	1030 bar





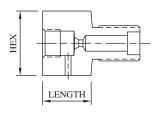


Non-shaded items in-stock and available — Shaded items maufactured to order

Model No. 3K203 3DVK203

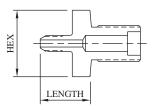
FEMALE M/P CONED AND THREADED TUBE

	F	For Side Connections				For Bottom Connection				
Connection	Suffix	Hex	Length	Port	Suffix	Hex	Length	Port	MAWP*	
1/4" M/P	16	0.75"	1.00"	0.125"	16B	1.00"	1.00"	0.125"	20,000 PSI	
1/4 IVI/F	10	(19.1)	(25.4)	(3.2)	10D	(25.4)	(25.4)	(3.2)	1380 bar	
3/8" M/P	17	0.75"	1.00"	0.203"	17B	1.00"	1.00"	0.203"	20,000 PSI	
3/6 IVI/F	17	(19.1)	(25.4)	(5.2)	1/1	(25.4)	(25.4)	(5.2)	1380 bar	
9/16" M/P	18	1.00"	1.25"	0.250"	18B	1.00"	1.25"	0.312"	20,000 PSI	
9/10 IVI/F	10	(25.4)	(31.8)	(6.4)	10D	(25.4)	(31.8)	(7.9)	1380 bar	



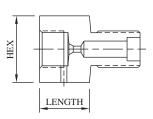
MALE M/P CONED AND THREADED TUBE

	F	or Side (Connectio	ns	Fo				
Connection	Suffix	Hex	Length	Port	Suffix	Hex	Length	Port	MAWP*
1/4" M/P	8	0.75"	1.88"	0.109"	8B	1.00"	1.88"	0.109"	20,000 PSI
1/4 IVI/F	O	(19.1)	(47.8)	(2.8)	ов	(25.4)	(47.8)	(2.8)	1380 bar
3/8" M/P	10	0.75"	1.87"	0.203"	10B	1.00"	2.13"	0.203"	20,000 PSI
3/6 IVI/F	10	(19.1)	(47.5)	(5.2)	100	(25.4)	(54.1)	(5.2)	1380 bar
9/16" M/P	11	0.75"	2.15"	0.203"	11B	1.12"	2.12"	0.312"	20,000 PSI
9/10 NI/F	11	(19.1)	(54.6)	(5.2)	1110	(28.4)	(53.8)	(7.9)	1380 bar



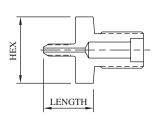
FEMALE H/P CONED AND THREADED TUBE

	F	or Side (Connectio	ons	Fo	ion			
Connection	Suffix	Hex	Length	Port	Suffix	Hex	Length	Port	MAWP*
1/4" H/P	23	0.75"	1.00"	0.093"	23B	1.00"	0.81"	0.093"	20,000 PSI
1/4 11/1	23	(19.1)	(25.4)	(2.4)	231	(25.4)	(20.6)	(2.4)	1380 bar
3/8" H/P	24	1.00"	1.00"	0.125"	24B	1.00"	0.94"	0.125"	20,000 PSI
3/6 11/1	24	(25.4)	(25.4)	(3.2)	24D	(25.4)	(23.9)	(3.2)	1380 bar
9/16" H/P	25	1.38"	1.12"	0.187"	25B	1.38"	1.19"	0.187"	20,000 PSI
9/10 11/1	23	(35.1)	(28.4)	(4.7)	230	(35.1)	(30.2)	(4.7)	1380 bar



MALE H/P CONED AND THREADED TUBE

	F	or Side (Connectio	ns	Fo	tion			
Connection	Suffix	Hex	Length	Port	Suffix	Hex	Length	Port	MAWP*
1/4" H/P	9	0.75"	1.91"	0.083"	9B	1.00"	1.91"	0.083"	20,000 PSI
1/4 П/Г	9	(19.1)	(48.5)	(2.1)	9Б	(25.4)	(48.5)	(2.1)	1380 bar
3/8" H/P	30	0.75"	2.34"	0.125"	30B	1.00"	2.39"	0.125"	20,000 PSI
3/6 11/1	30	(19.1)	(59.4)	(3.2)	301	(25.4)	(60.7)	(3.2)	1380 bar
9/16" H/P	42	0.75"	2.72"	0.187"	42B	1.00"	2.78"	0.187"	20,000 PSI
9/10 П/Г	42	(19.1)	(69.1)	(4.7)	42D	(25.4)	(70.6)	(4.7)	1380 bar







LENGTHS TO BODY WIDTH

Model No. 3K206 3DVK206

*MAWP: 20,000 PSI (1380 bar)

Port: 0.375" (9.5 mm)

Cv: 2.40

Materials of Construction:

- -316 cold-worked stainless steel body and side adapters
- -17-4PH stem
- -PEEK ball seals
- -Viton O-rings
- -PTFE back-ups

Ordering information and options on page BV-2

Repair Kit P/N's RK-3K206 and RK-3DVK206 contain stem, trunnion, trunnion seals and seal retainers, o-rings, backups, spring washers, and bearing washers

Non-shaded items in-stock and available Shaded items manufactured to order

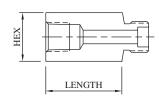
Panel: 1.06" (26.9 mm) dia 0.25" (6.3 mm) max thickness Side: 0.28" (7.1 mm) dia 1.75" (44.45) THICK BLOCK SELECT SIDE AND BOTTOM CONNECTIONS FROM PAGES BV-34 & BV-35 TO DETERMINE OVERALL LENGTH, ADD CONNECTION

Mounting:

For replacement connections, use prefix number **36-** and suffix number. Ex: 36-20

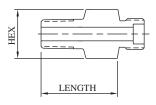
FEMALE PIPE

	F	or Side (Connectio	ns	Fo	tion			
Connection	Suffix	Hex	Length	Port	Suffix	Hex	Length	Port	MAWP*
1/4" FNPT	20	1.38"	1.00"	0.437"	20B	1.38"	1.06"	0.375"	15,000 PSI
1/4 1/11 1	20	(35.1)	(25.4)	(11.1)	201	(35.1)	(26.9)	(9.5)	1030 bar
3/8" FNPT	21	1.38"	1.00"	0.500"	21B	1.38"	1.06"	0.375"	15,000 PSI
3/6 FNF1	21	(35.1)	(25.4)	(12.7)	211	(35.1)	(26.9)	(9.5)	1030 bar
1/2" FNPT	22	1.38"	1.00"	0.500"	22B	1.38"	1.06"	0.375"	15,000 PSI
1/2 1/11/1	22	(35.1)	(25.4)	(12.7)	220	(35.1)	(26.9)	(9.5)	1030 bar
3/4" FNPT	41	1.38"	1.10"	0.500"	41B	1.38"	1.17"	0.375"	10,000 PSI
3/4 FINE I	71	(35.1)	(27.9)	(12.7)	410	(35.1)	(29.7)	(9.5)	690 bar
1" FNPT	45	1.75"	1.75"	0.500"	45B	1.75"	1.75"	0.500"	10,000 PSI
1 TAFT	43	(44.5)	(44.5)	(12.7)	43B	(44.5)	(44.5)	(12.7)	690 bar



MALE PIPE

	For Side Connections				For Bottom Connection				
Connection	Suffix	Hex	Length	Port	Suffix	Hex	Length	Port	
1/4" MNPT	5	1.38"	1.22"	0.250"	5B	1.38"	1.31"	0.250"	15,000 PSI
1/4 IVIINF I	3	(35.1)	(31.0)	(6.4)	ЗВ	(35.1)	(33.3)	(6.4)	1030 bar
3/8" MNPT	6	1.38"	1.23"	0.375"	6B	1.38"	1.43"	0.375"	15,000 PSI
5/6 WINF I	U	(35.1)	(31.2)	(9.5)	OD	(35.1)	(36.3)	(9.5)	1030 bar
1/2" MNPT	7	1.38"	1.59"	0.375"	7 B	1.38"	1.63"	0.375"	15,000 PSI
1/2 IVIINF I		(35.1)	(40.4)	(9.5)		(35.1)	(41.4)	(9.5)	1030 bar
3/4" MNPT	55	1.38"	1.62"	0.500"	55B	1.38"	1.65"	0.375"	10,000 PSI
3/4 WINE I	33	(35.1)	(41.1)	(12.7)		(35.1)	(41.9)	(9.5)	690 bar
1" MNPT	56	1.50"	1.87"	0.500"	56B	1.50"	1.90"	0.375"	10,000 PSI
1 MINP1	30	(38.1)	(47.5)	(12.7)	SUD	(38.1)	(48.3)	(9.5)	690 bar





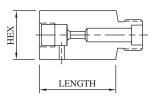


Non-shaded items in-stock and available Shaded items manufactured to order

Model No. 3K206 3DVK206

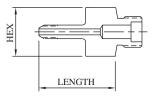
FEMALE M/P CONED AND THREADED TUBE

	For Side Connections				For Bottom Connection				
Connection	Suffix	Hex	Length	Port	Suffix	Hex	Length	Port	MAWP*
1/4" M/P	16	1.38"	0.65"	0.109"	16B	1.38"	0.72"	0.109"	20,000 PSI
1/4 IVI/F	10	(35.1)	(16.5)	(2.8)	10D	(35.1)	(18.3)	(2.8)	1380 bar
3/8" M/P	17	1.38"	1.06"	0.203"	17B	1.38"	1.06"	0.203"	20,000 PSI
3/6 IVI/I		(35.1)	(26.9)	(5.2)	1/D	(35.1)	(26.9)	(5.2)	1380 bar
9/16" M/P	18	1.38"	1.31"	0.312"	18B	1.38"	1.06"	0.312"	20,000 PSI
		(35.1)	(33.3)	(7.9)		(35.1)	(26.9)	(7.9)	1380 bar
3/4" M/P	32	1.38"	1.52"	0.437"	32B	1.38"	1.18"	0.375"	20,000 PSI
		(35.1)	(38.6)	(11.1)		(35.1)	(30.0)	(9.5)	1380 bar
1" M/P	43	1.75"	1.91"	0.500"	43B	1.75"	1.99"	0.375"	20,000 PSI
		(44.5)	(48.5)	(12.7)		(44.5)	(50.5)	(9.5)	1380 bar



MALE M/P CONED AND THREADED TUBE

	For Side Connections			For Bottom Connection					
Connection	Suffix	Hex	Length	Port	Suffix	Hex	Length	Port	MAWP*
3/8" M/P	10	1.38"	1.87"	0.203"	10B	1.38"	2.17"	0.203"	20,000 PSI
3/6 IVI/P	10	(35.1)	(47.5)	(5.2)		(35.1)	(55.1)	(5.2)	1380 bar
9/16" M/P	11	1.38"	3.21"	0.312"	11B	1.38"	2.18"	0.312"	20,000 PSI
		(35.1)	(81.5)	(7.9)		(35.1)	(55.4)	(7.9)	1380 bar
3/4" M/P	37	1.38"	3.54"	0.437"	37B	1.38"	5.06"	0.437"	20,000 PSI
		(35.1)	(89.9)	(11.1)		(35.1)	(128.5)	(11.1)	1380 bar
1" M/P	49	1.38"	3.20"	0.500"	49B	1.38"	3.25"	0.500"	20,000 PSI
		(35.1)	(81.3)	(12.7)		(35.1)	(82.6)	(12.7)	1380 bar







Model No. 4K103

*MAWP: 10,000 PSI (690 bar) Port: 0.187" (4.7 mm)

Cv: 0.56

Materials of Construction:

- -316 cold-worked stainless steel body and side adapters
- -17-4PH stem
- -PEEK ball seals
- -Viton O-rings
- -PTFE back-ups

Ordering information and options on page BV-2

Repair Kit P/N RK-4K103 contains stem, trunnion, trunnion seals and seal retainers, o-rings, backups, spring washers, and bearing washers

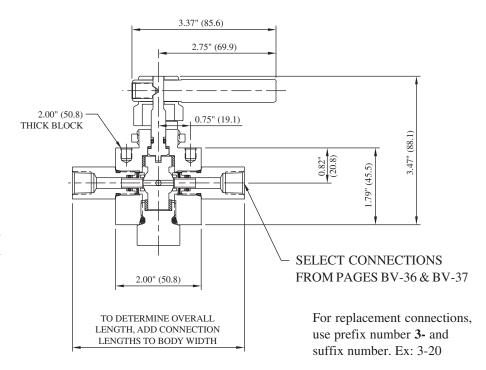
Non-shaded items in-stock and available Shaded items manufactured to order

Mounting:

Panel: 1.06" (26.9 mm) dia

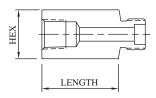
0.25" (6.4 mm) max thickness

Top: 1/4"-20 UNC



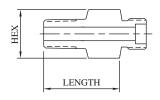
FEMALE PIPE

Connection	Suffix	Hex	Length	Port	MAWP*
1/8" FNPT	19	0.75"	0.60"	0.250"	15,000 PSI
1/6 THET	19	(19.1)	(15.2)	(6.4)	1030 bar
1/4" FNPT	20	0.75"	0.60"	0.250"	15,000 PSI
1/4 FNP1		(19.1)	(15.2)	(6.4)	1030 bar
3/8" FNPT	21	1.00"	1.01"	0.250"	15,000 PSI
		(25.4)	(25.7)	(6.4)	1030 bar
1/2" FNPT	22	1.00"	1.01"	0.250"	15,000 PSI
1/2 THEI	22	(25.4)	(25.7)	(6.4)	1030 bar



MALE PIPE

WILLE I II E								
Connection Suff		Hex	Length	Port	MAWP*			
1/8" MNPT	4	0.75"	1.01"	0.125"	15,000 PSI			
1/8 MINPI	4	(19.1)	(25.7)	(3.2)	1030 bar			
1/4" MNPT	5	0.75"	1.01"	0.250"	15,000 PSI			
1/4 MINP1		(19.1)	(25.7)	(6.4)	1030 bar			
3/8" MNPT	6	0.75"	1.01"	0.250"	15,000 PSI			
		(19.1)	(25.7)	(6.4)	1030 bar			
1/2" MNPT	7	1.00"	1.26"	0.250"	15,000 PSI			
		(25.4)	(32.0)	(6.4)	1030 bar			







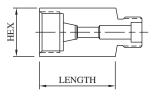
Non-shaded items in-stock and available — Shaded items manufactured to order

Model No.

4K103

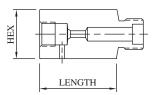
FEMALE SINGLE-FERRULE TUBE

Connection	Suffix	Hex	Length	Port	MAWP*
1/8" L/P	12	0.75"	0.78"	0.093"	15,000 PSI
1/6 L/F	12	(19.1)	(19.8)	(2.4)	1030 bar
1/4" SL/P	13	0.75"	1.03"	0.125"	11,500 PSI
1/4 SL/F	13	(19.1)	(26.2)	(3.2)	790 bar
3/8" SL/P	14	0.75"	1.03"	0.250"	7,500 PSI
3/6 SL/F	14	(19.1)	(26.2)	(6.4)	520 bar
1/2" L/P	15	1.00"	1.03"	0.250"	5,500 PSI
1/2 L/P	15	(25.4)	(26.2)	(6.4)	380 bar



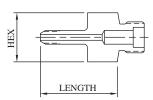
FEMALE M/P CONED AND THREADED TUBE

Connection	Suffix	Hex	Length	Port	MAWP*
1/4" M/P	16	0.75"	0.74"	0.109"	20,000 PSI
1/4 IVI/P	10	(19.1)	(18.8)	(2.8)	1380 bar
3/8" M/P	17	0.75"	1.01"	0.203"	20,000 PSI
3/8 WI/F	17	(19.1)	(25.7)	(5.2)	1380 bar
9/16" M/P	18	1.00"	1.26"	0.250"	20,000 PSI
9/10 M/P	10	(25.4)	(32.0)	(6.4)	1380 bar



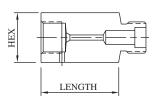
MALE M/P CONED AND THREADED TUBE

Connection	Suffix	Hex	Length	Port	MAWP*
1/4" M/P	8	0.75"	1.88"	0.109"	20,000 PSI
1/4 IVI/F	0	(19.1)	(47.8)	(2.8)	1380 bar
3/8" M/P	10	0.75"	2.00"	0.203"	20,000 PSI
3/8 IVI/P	10	(19.1)	(50.8)	(5.2)	1380 bar
9/16" M/P	11	1.00"	2.31"	0.250"	20,000 PSI
9/10 M/P	11	(25.4)	(58.7)	(6.4)	1380 bar



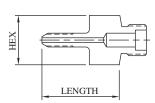
FEMALE H/P CONED AND THREADED TUBE

Connection	Suffix	Hex	Length	Port	MAWP*
1/4" H/P	23	0.75"	1.01"	0.093"	20,000 PSI
1/4 11/1	23	(19.1)	(25.7)	(2.4)	1380 bar
3/8" H/P	24	1.00"	1.17"	0.125"	20,000 PSI
3/6 11/1	24	(25.4)	(29.7)	(3.2)	1380 bar
9/16" H/P	25	1.37"	1.25"	0.187"	20,000 PSI
9/10 П/Р	25	(34.8)	(31.8)	(4.7)	1380 bar



MALE H/P CONED AND THREADED TUBE

WHILE IN CONED IN DIMER DED TODE							
Connection	Suffix	Hex	Length	Port	MAWP*		
1/4" H/P	9	0.75"	1.94"	0.083"	20,000 PSI		
1/4 П/Р	9	(19.1)	(49.3)	(2.1)	1380 bar		
3/8" H/P	30	0.75"	2.25"	0.125"	20,000 PSI		
3/8 H/P	30	(19.1)	(57.2)	(3.2)	1380 bar		
9/16" H/P	42	0.75"	2.82"	0.187"	20,000 PSI		
9/10 H/P	42	(19.1)	(71.6)	(4.7)	1380 bar		







Model No. 4K106

*MAWP: 10,000 PSI (690 bar) Port: 0.375" (9.5 mm)

Cv: 2.40

Materials of Construction:

- -316 cold-worked stainless steel body and side adapters
- -17-4PH stem
- -PEEK ball seals
- -Viton O-rings
- -PTFE back-ups

Ordering information and options on page BV-2

Repair Kit P/N RK-4K106 contains stem, trunnion, trunnion seals and seal retainers, o-rings, backups, spring washers, and bearing washers

Non-shaded items in-stock and available Shaded items manufactured to order

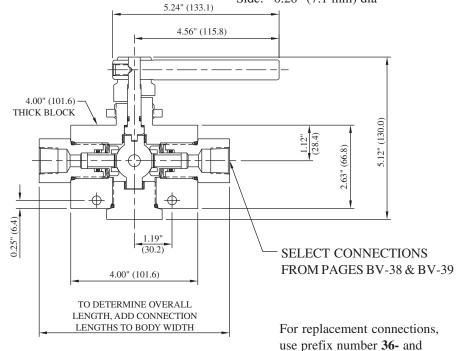
Mounting:

Panel: 1.28" (32.5 mm) dia

0.43" (11.0 mm) max thickness

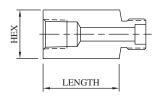
suffix number. Ex: 36-20

Side: 0.28" (7.1 mm) dia



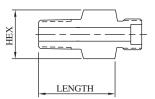
FEMALE PIPE

Connection	Suffix	Hex	Length	Port	MAWP*
1/4" FNPT	20	1.38"	1.00"	0.437"	15,000 PSI
1/4 1/11/1	20	(35.1)	(25.4)	(11.1)	1030 bar
3/8" FNPT	21	1.38"	1.00"	0.500"	15,000 PSI
3/6 FINE I	21	(35.1)	(25.4)	(12.7)	1030 bar
1/2" FNPT	22	1.38"	1.00"	0.500"	15,000 PSI
1/2 FINE I	22	(35.1)	(25.4)	(12.7)	1030 bar
3/4" FNPT	41	1.38"	1.10"	0.500"	10,000 PSI
3/4 FINE I	41	(35.1)	(27.9)	(12.7)	690 bar
1" FNPT	45	1.75"	1.75"	0.500"	10,000 PSI
1 FINE 1	43	(44.5)	(44.5)	(12.7)	690 bar



MALE PIPE

Connection	Suffix	Hex	Length	Port	MAWP*
1/4" MNPT	5	1.38"	1.22"	0.250"	15,000 PSI
1/4 WINF1	3	(35.1)	(31.0)	(6.4)	1030 bar
3/8" MNPT	6	1.38"	1.23"	0.375"	15,000 PSI
3/6 WINF I	6	(35.1)	(31.2)	(9.5)	1030 bar
1/2" MNPT	7	1.38"	1.59"	0.375"	15,000 PSI
1/2 WINF I	/	(35.1)	(40.4)	(9.5)	1030 bar
3/4" MNPT	55	1.38"	1.62"	0.500"	10,000 PSI
3/4 WINF I	33	(35.1)	(41.1)	(12.7)	690 bar
1" MNPT	56	1.50"	1.87"	0.500"	10,000 PSI
1 WINF I	30	(38.1)	(47.5)	(12.7)	690 bar







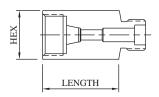
Non-shaded items in-stock and available — Shaded items manufactured to order

Model No.

4K106

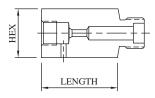
FEMALE SINGLE-FERRULE TUBE

Connection	Suffix	Hex	Length	Port	MAWP*
1/4" SL/P	12	1.38"	0.64"	0.187"	11,500 PSI
1/4 SL/F	13	(35.1)	(16.3)	(4.7)	790 bar
3/8" SL/P	14	1.38"	0.75"	0.312"	7,500 PSI
3/6 SL/P	14	(35.1)	(19.1)	(7.9)	520 bar
1/2" L/P	15	1.38"	1.06"	0.437"	5,500 PSI
1/2 L/P	15	(35.1)	(26.9)	(11.1)	380 bar



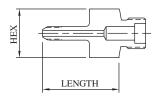
FEMALE M/P CONED AND THREADED TUBE

Connection	Suffix	Hex	Length	Port	MAWP*
1/4" M/P	16	1.38"	0.65"	0.109"	20,000 PSI
1/4 IVI/F	10	(35.1)	(16.5)	(2.8)	1380 bar
3/8" M/P	17	1.38"	1.06"	0.203"	20,000 PSI
3/6 IVI/I	17	(35.1)	(26.9)	(5.2)	1380 bar
9/16" M/P	18	1.38"	1.31"	0.312"	20,000 PSI
9/10 M/P	10	(35.1)	(33.3)	(7.9)	1380 bar
3/4" M/P	32	1.38"	1.52"	0.437"	20,000 PSI
3/4 IVI/F	32	(35.1)	(38.6)	(11.1)	1380 bar
1" M/P	43	1.75"	1.91"	0.500"	20,000 PSI
1 IVI/P	43	(44.5)	(48.5)	(12.7)	1380 bar



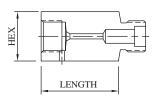
MALE M/P CONED AND THREADED TUBE

Connection	Suffix	Hex	Length	Port	MAWP*
1/4" M/P	8	1.38"	1.91"	0.109"	20,000 PSI
1/4 IVI/F	0	(35.1)	(48.5)	(2.8)	1380 bar
3/8" M/P	10	1.38"	1.87"	0.203"	20,000 PSI
3/6 IVI/I	10	(35.1)	(47.5)	(5.2)	1380 bar
9/16" M/P	11	1.38"	3.21"	0.312"	20,000 PSI
9/10 IVI/F	11	(35.1)	(81.5)	(7.9)	1380 bar
3/4" M/P	37	1.38"	3.54"	0.437"	20,000 PSI
3/4 WI/F	31	(35.1)	(89.9)	(11.1)	1380 bar
1" M/P	49	1.38"	3.20"	0.500"	20,000 PSI
1 1/1/17	49	(35.1)	(81.3)	(12.7)	1380 bar



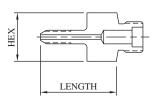
FEMALE H/P CONED AND THREADED TUBE

Connection	Suffix	Hex	Length	Port	MAWP*
1/4" H/P	23	1.38"	0.58"	0.093"	20,000 PSI
1/4 П/Р	23	(35.1)	(14.7)	(2.4)	1380 bar
3/8" H/P	24	1.38"	0.89"	0.125"	20,000 PSI
3/0 H/F	24	(35.1)	(22.6)	(3.2)	1380 bar
0/16" 11/D	25	1.50"	0.98"	0.187"	20,000 PSI
9/16" H/P	25	(38.1)	(24.9)	(4.7)	1380 bar



MALE H/P CONED AND THREADED TUBE

Connection	Suffix	Hex	Length	Port	MAWP*
1/4" H/P	9	1.38"	2.16"	0.083"	20,000 PSI
1/4 П/Г	9	(35.1)	(54.9)	(2.1)	1380 bar
3/8" H/P	30	1.38"	2.40"	0.125"	20,000 PSI
3/6 H/P	30	(35.1)	(61.0)	(3.2)	1380 bar
9/16" H/P	42	1.38"	2.89"	0.187"	20,000 PSI
9/10 H/P	42	(35.1)	(73.4)	(4.7)	1380 bar







Model No. 5K103

*MAWP: 10,000 PSI (690 bar) Port: 0.187" (4.7 mm)

Cv: 0.56

Materials of Construction:

- -316 cold-worked stainless steel body and side adapters
- -17-4PH stem
- -PEEK ball seals
- -Viton O-rings
- -PTFE back-ups

Ordering information and options on page BV-2

Repair Kit P/N RK-5K103 contains stem, trunnion, trunnion seals and seal retainers, o-rings, backups, spring washers, and bearing washers

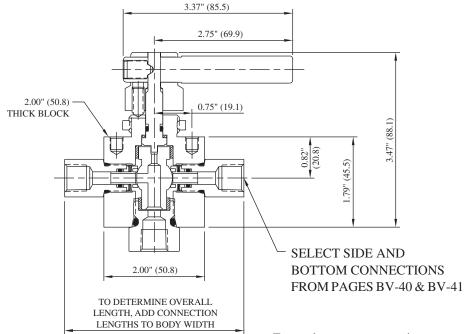
Non-shaded items in-stock and available Shaded items manufactured to order

Mounting:

Panel: 1.06" (26.9 mm) dia

0.25" (6.4 mm) max thickness

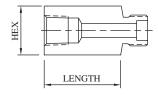
Top: 1/4"-20 UNC



For replacement connections, use prefix number **3-** and suffix number. Ex: 3-20

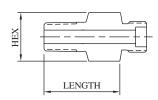
FEMALE PIPE

	F	or Side (Connectio	ns	Fo	tion			
Connection	Suffix	Hex	Length	Port	Suffix	Hex	Length	Port	MAWP*
1/8" FNPT	19	0.75"	0.60"	0.250"	19B	1.00"	0.63"	0.250"	15,000 PSI
1/0 1/11/1	1)	(19.1)	(15.2)	(6.4)	171	(25.4)	(16.0)	(6.4)	1030 bar
1/4" FNPT	20	0.75"	0.60"	0.250"	20B	1.00"	0.55"	0.250"	15,000 PSI
1/4 FNF1	20	(19.1)	(15.2)	(6.4)	20D	(25.4)	(14.0)	(6.4)	1030 bar
3/8" FNPT	21	1.00"	1.01"	0.250"	21B	1.00"	1.01"	0.250"	15,000 PSI
3/6 FNF1	21	(25.4)	(25.7)	(6.4)	210	(25.4)	(25.7)	(6.4)	1030 bar
1/2" FNPT	22	1.00"	1.01"	0.250"	22B	1.00"	1.16"	0.250"	15,000 PSI
1/2 11111	22	(25.4)	(25.7)	(6.4)	220	(25.4)	(29.5)	(6.4)	1030 bar



MALE PIPE

	F	or Side (Connectio	ns	Fo	tion			
Connection	Suffix	Hex	Length	Port	Suffix	Hex	Length	Port	MAWP*
1/8" MNPT	4	0.75"	1.01"	0.125"	4B	1.00"	0.93"	0.125"	15,000 PSI
1/6 WINF1	4	(19.1)	(25.7)	(3.2)	40	(25.4)	(23.6)	(3.2)	1030 bar
1/4" MNPT	5	0.75"	1.01"	0.250"	5B	1.00"	1.05"	0.250"	15,000 PSI
1/4 WINF1	3	(19.1)	(25.7)	(6.4)	ЭВ	(25.4)	(26.7)	(6.4)	1030 bar
3/8" MNPT	6	0.75"	1.01"	0.250"	6B	1.00"	1.01"	0.250"	15,000 PSI
3/8 WINE I	U	(19.1)	(25.7)	(6.4)	OD	(25.4)	(25.7)	(6.4)	1030 bar
1/2" MNPT	7	1.00"	1.26"	0.250"	7B	1.00"	1.29"	0.250"	15,000 PSI
1/2 WINF I	/	(25.4)	(32.0)	(6.4)	7 B	(25.4)	(32.8)	(6.4)	1030 bar







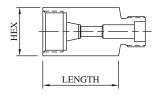
Non-shaded items in-stock and available — Shaded items manufactured to order

Model No.

5K103

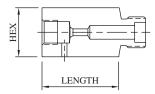
FEMALE SINGLE-FERRULE TUBE

	F	or Side (Connectio	ns	Fo	tion			
Connection	Suffix	Hex	Length	Port	Suffix	Hex	Length	Port	MAWP*
1/8" L/P	12	0.75"	0.78"	0.093"	12B	1.00"	0.55"	0.093"	15,000 PSI
1/0 L/F	12	(19.1)	(19.8)	(2.4)	120	(25.4)	(14.0)	(2.4)	1030 bar
1/4" SL/P	13	0.75"	1.03"	0.125"	13B	1.00"	0.83"	0.125"	11,500 PSI
1/4 SL/F	13	(19.1)	(26.2)	(3.2)	130	(25.4)	(21.0)	(3.2)	790 bar
3/8" SL/P	14	0.75"	1.03"	0.250"	14B	1.00"	1.01"	0.250"	7,500 PSI
3/6 SL/F	14	(19.1)	(26.2)	(6.4)	14D	(25.4)	(25.7)	(6.4)	520 bar
1/2" L/P	15	1.00"	1.03"	0.250"	15B	1.00"	1.01"	0.250"	5,500 PSI
1/2 L/F	15	(25.4)	(26.2)	(6.4)	13B	(25.4)	(25.7)	(6.4)	380 bar



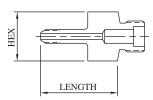
FEMALE M/P CONED AND THREADED TUBE

	F	or Side (Connectio	ons	Fo	tion			
Connection	Suffix	Hex	Length	Port	Suffix	Hex	Length	Port	MAWP*
1/4" M/P	16	0.75"	0.74"	0.109"	16B	1.00"	0.76"	0.109"	20,000 PSI
1/4 IVI/F	10	(19.1)	(18.8)	(2.8)	10D	(25.4)	(19.3)	(2.8)	1380 bar
3/8" M/P	17	0.75"	1.01"	0.203"	17B	1.00"	0.83"	0.203"	20,000 PSI
3/8 WI/F	17	(19.1)	(25.7)	(5.2)	1/1	(25.4)	(21.0)	(5.2)	1380 bar
9/16" M/P	18	1.00"	1.26"	0.250"	18B	1.00"	1.01"	0.312"	20,000 PSI
9/10 IVI/F	10	(25.4)	(32.0)	(6.4)	10D	(25.4)	(25.7)	(7.9)	1380 bar



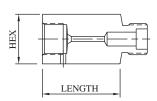
MALE M/P CONED AND THREADED TUBE

	F	or Side (Connectio	ns	Fo	tion			
Connection	Suffix	Hex	Length	Port	Suffix	Hex	Length	Port	MAWP*
1/4" M/P	8	0.75"	1.88"	0.109"	8B	1.00"	1.88"	0.109"	20,000 PSI
1/4 IVI/F	0	(19.1)	(47.8)	(2.8)	OD	(25.4)	(47.8)	(2.8)	1380 bar
3/8" M/P	10	0.75"	2.00"	0.203"	10B	1.00"	2.00"	0.203"	20,000 PSI
3/6 IVI/F	10	(19.1)	(50.8)	(5.2)	100	(25.4)	(50.8)	(5.2)	1380 bar
9/16" M/P	11	1.00"	2.31"	0.250"	11B	1.12"	2.95"	0.312"	20,000 PSI
9/10 NI/F	11	(25.4)	(58.7)	(6.4)	1110	(28.4)	(74.9)	(7.9)	1380 bar



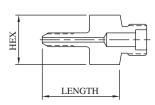
FEMALE H/P CONED AND THREADED TUBE

	F	or Side (Connectio	ons	Fo	tion			
Connection	Suffix	Hex	Length	Port	Suffix	Hex	Length	Port	MAWP*
1/4" H/P	23	0.75"	1.01"	0.093"	23B	1.00"	0.89"	0.093"	20,000 PSI
1/4 11/1	23	(19.1)	(25.7)	(2.4)	230	(25.4)	(22.6)	(2.4)	1380 bar
3/8" H/P	24	1.00"	1.17"	0.125"	24B	1.00"	0.99"	0.125"	20,000 PSI
3/6 11/1	24	(25.4)	(29.7)	(3.2)	24D	(25.4)	(25.1)	(3.2)	1380 bar
9/16" H/P	25	1.37"	1.25"	0.187"	25B	1.37"	1.25"	0.187"	20,000 PSI
9/10 H/P	25	(34.8)	(31.8)	(4.7)	23B	(34.8)	(31.8)	(4.7)	1380 bar



MALE H/P CONED AND THREADED TUBE

	F	or Side (Connectio	ns	Fo	tion			
Connection	Suffix	Hex	Length	Port	Suffix	Hex	Length	Port	MAWP*
1/4" H/P	9	0.75"	1.94"	0.083"	9B	1.00"	2.12"	0.083"	20,000 PSI
1/4 П/Г	9	(19.1)	(49.3)	(2.1)	ЭБ	(25.4)	(53.8)	(2.1)	1380 bar
3/8" H/P	30	0.75"	2.25"	0.125"	30B	1.00"	2.35"	0.125"	20,000 PSI
3/6 11/1	30	(19.1)	(57.2)	(3.2)	301	(25.4)	(59.7)	(3.2)	1380 bar
9/16" H/P	42	0.75"	2.82"	0.187"	42B	1.00"	2.88"	0.187"	20,000 PSI
9/10 П/Г	42	(19.1)	(71.6)	(4.7)	42B	(25.4)	(73.2)	(4.7)	1380 bar







5K106 Model No.

*MAWP: 10,000 PSI (690 bar) 0.375" (9.5 mm) Port:

2.40 Cv:

Materials of Construction:

- -316 cold-worked stainless steel body and side adapters
- -17-4PH stem
- -PEEK ball seals
- -Viton O-rings
- -PTFE back-ups

Ordering information and options on page BV-2

Repair Kit P/N RK-5K106 contains stem, trunnion, trunnion seals and seal retainers, o-rings, backups, spring washers, and bearing washers

For Side Connections

Non-shaded items in-stock and available Shaded items manufactured to order

FEMALE PIPE

Connection	Suffix	Hex	Length	Port	Suffix	Hex	Length	Port	MAWP*
1/4" FNPT	20	1.38"	1.00"	0.437"	20B	1.75"	0.37"	0.375"	15,000 PSI
1/4 1/11/1	20	(35.1)	(25.4)	(11.1)	201	(44.5)	(9.4)	(9.5)	1030 bar
3/8" FNPT	21	1.38"	1.00"	0.500"	21B	1.75"	1.06"	0.375"	15,000 PSI
3/6 1111	21	(35.1)	(25.4)	(12.7)	210	(44.5)	(26.9)	(9.5)	1030 bar
1/2" FNPT	22	1.38"	1.00"	0.500"	22B	1.75"	1.11"	0.375"	15,000 PSI
1/2 FINE I	22	(35.1)	(25.4)	(12.7)	220	(44.5)	(28.2)	(9.5)	1030 bar
3/4" FNPT	41	1.38"	1.10"	0.500"	41B	1.75"	1.17"	0.375"	10,000 PSI
3/4 FINE I	41	(35.1)	(27.9)	(12.7)	41D	(44.5)	(29.7)	(9.5)	690 bar
1" FNPT	45	1.75"	1.75"	0.500"	45B	1.75"	1.75"	0.500"	10,000 PSI
1 FNP1	45	(44.5)	(44.5)	(12.7)	45D	(44.5)	(44.5)	(12.7)	690 bar
MALE PIPI	E								

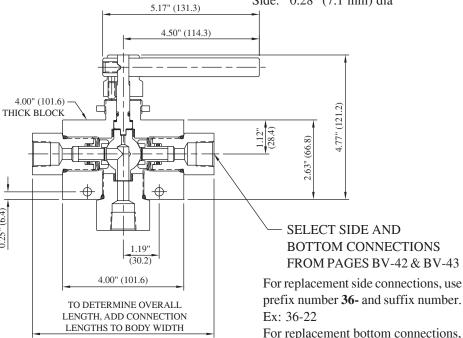
For Bottom Connection

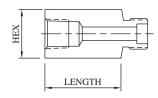
Mounting:

Panel: 1.28" (32.5 mm) dia

0.43" (11.0 mm) max thickness

Side: 0.28" (7.1 mm) dia



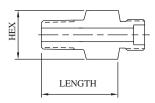


number. Ex: 46-22B

use prefix number 46- and suffix

For Side Connections **For Bottom Connection**

Connection	Suffix	Hex	Length	Port	Suffix	Hex	Length	Port	MAWP*
1/4" MNPT	5	1.38"	1.22"	0.250"	5B	1.75"	1.31"	0.250"	15,000 PSI
1/4 WINT 1	3	(35.1)	(31.0)	(6.4)	SD	(44.5)	(33.3)	(6.4)	1030 bar
3/8" MNPT	6	1.38"	1.23"	0.375"	6B	1.75"	1.43"	0.375"	15,000 PSI
J/O IVIINI I	U	(35.1)	(31.2)	(9.5)	OD	(44.5)	(36.3)	(9.5)	1030 bar
1/2" MNPT	7	1.38"	1.59"	0.375"	7B	1.75"	1.63"	0.375"	15,000 PSI
1/2 WINT 1	,	(35.1)	(40.4)	(9.5)	7 D	(44.5)	(41.4)	(9.5)	1030 bar
3/4" MNPT	55	1.38"	1.62"	0.500"	55B	1.75"	1.65"	0.375"	10,000 PSI
3/4 WINT I	33	(35.1)	(41.1)	(12.7)	33 D	(44.5)	(41.9)	(9.5)	690 bar
1" MNPT	56	1.50"	1.87"	0.500"	56B	1.75"	1.90"	0.375"	10,000 PSI
1 IVIIVI I	30	(38.1)	(47.5)	(12.7)	30D	(44.5)	(48.3)	(9.5)	690 bar







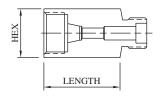
Non-shaded items in-stock and available — Shaded items manufactured to order

Model No.

5K106

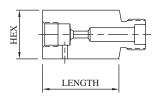
FEMALE SINGLE-FERRULE TUBE

	F	or Side (Connectio	ns	Fo	tion			
Connection	Suffix	Hex	Length	Port	Suffix	Hex	Length	Port	MAWP*
1/4" SL/P	13	1.38"	0.64"	0.187"	13B	1.75"	0.66"	0.187"	11,500 PSI
1/4 SL/P	13	(35.1)	(16.3)	(4.7)	130	(44.5)	(16.8)	(4.7)	790 bar
3/8" SL/P	14	1.38"	0.75"	0.312"	14B	1.75"	0.75"	0.312"	7,500 PSI
3/6 SL/F	14	(35.1)	(19.1)	(7.9)	14D	(44.5)	(19.1)	(7.9)	520 bar
1/2" L/P	15	1.38"	1.06"	0.437"	15B	1.75"	1.06"	0.375"	5,500 PSI
1/2 L/F	15	(35.1)	(26.9)	(11.1)	13B	(44.5)	(26.9)	(9.5)	380 bar



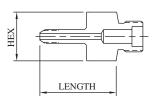
FEMALE M/P CONED AND THREADED TUBE

	F	or Side (Connectio	ons	Fo	tion			
Connection	Suffix	Hex	Length	Port	Suffix	Hex	Length	Port	MAWP*
1/4" M/P	16	1.38"	0.65"	0.109"	16B	1.75"	1.11"	0.109"	20,000 PSI
1/4 IVI/F	10	(35.1)	(16.5)	(2.8)	10D	(44.5)	(28.2)	(2.8)	1380 bar
3/8" M/P	17	1.38"	1.06"	0.203"	17B	1.75"	1.06"	0.203"	20,000 PSI
3/6 WI/F	17	(35.1)	(26.9)	(5.2)	1/1	(44.5)	(26.9)	(5.2)	1380 bar
9/16" M/P	18	1.38"	1.31"	0.312"	18B	1.75"	1.06"	0.312"	20,000 PSI
9/10 WI/F	10	(35.1)	(33.3)	(7.9)	10D	(44.5)	(26.9)	(7.9)	1380 bar
3/4" M/P	32	1.38"	1.52"	0.437"	32B	1.75"	1.18"	0.375"	20,000 PSI
3/4 IVI/I	32	(35.1)	(38.6)	(11.1)	320	(44.5)	(30.0)	(9.5)	1380 bar
1" M/P	43	1.75"	1.91"	0.500"	43B	1.75"	1.99"	0.375"	20,000 PSI
1 1/1/1	43	(44.5)	(48.5)	(12.7)	43D	(44.5)	(50.5)	(9.5)	1380 bar



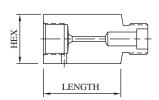
MALE M/P CONED AND THREADED TUBE

_	I	For Side C	Connectio:	ns	F	ion			
Connection	Suffix	Hex	Length	Port	Suffix	Hex	Length	Port	MAWP*
1/4" M/P	8	1.38"	1.91"	0.109"	8B	1.75"	1.93"	0.109"	20,000 PSI
1/4 1/1/1	0	(35.1)	(48.5)	(2.8)	ор	(44.5)	(49.0)	(2.8)	1380 bar
3/8" M/P	10	1.38"	1.87"	0.203"	10B	1.75"	2.17"	0.203"	20,000 PSI
3/0 IVI/F	10	(35.1)	(47.5)	(5.2)	100	(44.5)	(55.1)	(5.2)	1380 bar
9/16" M/P	11	1.38"	3.21"	0.312"	11B	1.75"	2.18"	0.312"	20,000 PSI
9/10 IVI/F	11	(35.1)	(81.5)	(7.9)	1110	(44.5)	(55.4)	(7.9)	1380 bar
3/4" M/P	37	1.38"	3.54"	0.437"	37B	1.75"	5.06"	0.437"	20,000 PSI
3/4 IVI/F	31	(35.1)	(89.9)	(11.1)	3/10	(44.5)	(128.5)	(11.1)	1380 bar
1" M/P	49	1.38"	3.20"	0.500"	49B	1.75"	3.25"	0.500"	20,000 PSI
1 1/1/1	77	(35.1)	(81.3)	(12.7)	771	(44.5)	(82.6)	(12.7)	1380 bar



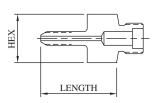
FEMALE H/P CONED AND THREADED TUBE

	For Side Connections			For Bottom Connection					
Connection	Suffix	Hex	Length	Port	Suffix	Hex	Length	Port	MAWP*
1/4" H/P	23	1.38"	0.58"	0.093"	23B	1.75"	0.60"	0.093"	20,000 PSI
1/4 П/Г	23	(35.1)	(14.7)	(2.4)	23B	(44.5)	(15.2)	(2.4)	1380 bar
3/8" H/P	24	1.38"	0.89"	0.125"	24B	1.75"	0.91"	0.125"	20,000 PSI
3/6 H/F		(35.1)	(22.6)	(3.2)	24D	(44.5)	(23.1)	(3.2)	1380 bar
9/16" H/P	25	1.50"	0.98"	0.187"	25B	1.75"	1.02"	0.187"	20,000 PSI
	25	(38.1)	(24.9)	(4.7)	25B	(44.5)	(25.9)	(4.7)	1380 bar



MALE H/P CONED AND THREADED TUBE

	F	For Side Connections			For Bottom Connection				
Connection	Suffix	Hex	Length	Port	Suffix	Hex	Length	Port	MAWP*
1/4" H/P	9	1.38"	2.16"	0.083"	9B	1.75"	2.19"	0.083"	20,000 PSI
	9	(35.1)	(54.9)	(2.1)	ЯĎ	(44.5)	(55.6)	(2.1)	1380 bar
2/01/11/15	20	1.38"	2.40"	0.125"	30B	1.75"	2.42"	0.125"	20,000 PSI
3/8" H/P	30	(35.1)	(61.0)	(3.2)	SUD	(44.5)	(61.5)	(3.2)	1380 bar
9/16" H/P	42	1.38"	2.89"	0.187"	42B	1.75"	2.92"	0.187"	20,000 PSI
	42	(35.1)	(73.4)	(4.7)	42D	(44.5)	(74.2)	(4.7)	1380 bar







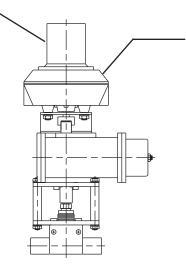
ACTUATORS

All BuTech ball valves can be fitted with pneumatic or electric actuators for remote control. The following pages show dimensional and technical data for our most popular actuators. Other models are available for unique applications. Please call our sales department for more information.

Available options for actuated valves include:

Visual Monitor-

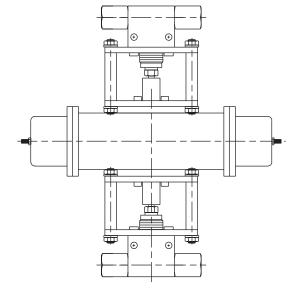
Valve position can be monitored from distances up to 150 ft (45 m) Specify option -LB



Limit Switches or Solenoid Valves

Two limit switches or solenoid pilot valves can be used for signalling lights, motors, micro-processors or hydraulic valves

Specify option **-**L for limit switches Specify option -S for solenoid valves



2 Valves / 1 Actuator

BuTech valves can be paired on a single actuator for simultaneous actuation. To order, determine catalog number for ordering a single valve, complete with connection numbers, options and actuator information (see page BV-2), then add the prefix "2"

Example

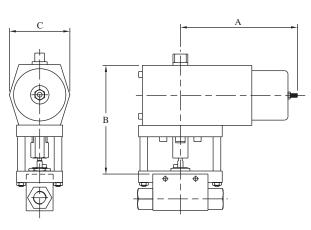
To specify two K104 valves with 1/4" FNPT connections mounted on a double-acting actuator, the catalog number would be 2K104-20-20-RC10DA





Double-Acting Aluminum Housing Pneumatic Actuators

For valve models beginning \boldsymbol{K} or $\boldsymbol{3DVK}$



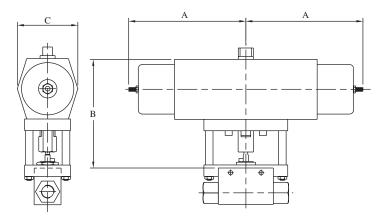


Figure 1 Figure 2

Maximum Air Pressure: 150 PSI (10 bar)

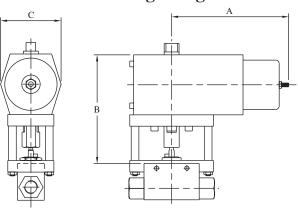
Operating	operating Temperature Range: -20 to 175° F (-29 to 79° C)			Air Consu	mption per	Required	Opening/		
Valve	Actuator]	Dimensional	Data		Stroke (1	Free Air)	Air	Closing
Model	Model	A	В	C	Fig.	Open	Close	Pressure	Time
К3	RA051DA	2.20"	5.53"	2.60"	1	51.0 cu in	51.0 cu in	80 PSI	1 sec
KJ	KAUJIDA	(55.9)	(140.5)	(66.0)	1	836 cc	836 cc	5.5 bar	1 800
K6	RA051DA	2.20"	5.53"	2.60"	1	51.0 cu in	51.0 cu in	80 PSI	1 sec
110	1031211	(55.9)	(140.5)	(66.0)	,	836 cc	836 cc	5.5 bar	1 500
K10	RA051DA	2.20"	5.53"	2.60"	1	51.0 cu in	51.0 cu in	80 PSI	1 sec
KIO	1031D/1	(55.9)	(140.5)	(66.0)	1	836 cc	836 cc	5.5 bar	1 300
K10	RA051DA	2.20"	6.08"	2.60"	1	51.0 cu in	51.0 cu in	80 PSI	1 sec
KIO	1031071	(55.9)	(154.4)	(66.0)	1	836 cc	836 cc	5.5 bar	1 300
K10	RA051DA	2.20"	6.08"	2.60"	1	51.0 cu in	51.0 cu in	80 PSI	1 sec
K10	KA031DA	(55.9)	(154.4)	(66.0)	1	836 cc	836 cc	5.5 bar	1 500
K108	RC20DA	3.85"	5.20"	3.00"	2	64.0 cu in	73.0 cu in	80 PSI	1 sec
K108	KC20DA	(97.8)	(132.1)	(76.2)		1049 cc	1196 cc	5.5 bar	1 sec
K20	D 4 05 1 D 4	2.20"	6.08"	2.60"	1	51.0 cu in	51.0 cu in	80 PSI	1 000
K20	RA051DA	(55.9)	(154.4)	(66.0)	1	836 cc	836 cc	5.5 bar	1 sec
K206	RA051DA	2.20"	6.08"	2.60"	1	51.0 cu in	51.0 cu in	80 PSI	1 sec
K200	KAUJIDA	(55.9)	(154.4)	(66.0)	1	836 cc	836 cc	5.5 bar	1 Sec
3DVK34	RA051DA	2.20"	5.60"	2.60"	1	51.0 cu in	51.0 cu in	80 PSI	1 000
3D V K34	KAUSIDA	(55.9)	(142.2)	(66.0)	1	836 cc	836 cc	5.5 bar	1 sec
3DVK63	RA051DA	2.20"	5.60"	2.60"	1	51.0 cu in	51.0 cu in	80 PSI	1 000
3D V K03	KAUJIDA	(55.9)	(142.2)	(66.0)	1	836 cc	836 cc	5.5 bar	1 sec
2DVIV02	D 4 05 1 D 4	2.20"	5.60"	2.60"	1	51.0 cu in	51.0 cu in	80 PSI	1
3DVK93	RA051DA	(55.9)	(142.2)	(66.0)	1	836 cc	836 cc	5.5 bar	1 sec
3DVK106	RC20DA	3.85"	5.20"	3.00"	2	64.0 cu in	73.0 cu in	80 PSI	1 000
3DVK100	KC20DA	(97.8)	(132.1)	(76.2)		1049 cc	1196 cc	5.5 bar	1 sec
2DVIZ100	DC20D4	5.30 "	7.00"	4.10"	1	122.0 cu in	266.0 cu in	80 PSI	1.5.2.0
3DVK108	RC30DA	(134.6)	(177.8)	(104.1)	1	1999 сс	4359 cc	5.5 bar	1.5-2.0 sec
2DVK122	D 4 05 1 D 4	2.20"	5.78"	2.60"	1	51.0 cu in	51.0 cu in	80 PSI	1
3DVK123	RA051DA	(55.9)	(146.8)	(66.0)	1	836 cc	836 cc	5.5 bar	1 sec
2DV///202	DC10DA	3.85"	5.51"	2.87"	1	32.0 cu in	61.0 cu in	80 PSI	1 000
3DVK203	RC10DA	(97.8)	(140.0)	(72.9)	1	524 cc	1000 cc	5.5 bar	1 sec
3DVK206	RC30DA	5.30"	6.82"	4.10"	1	122.0 cu in	226.0 cu in	80 PSI	1.5-2.0 sec
3D1KZ00	KCSUDA	(134.6)	(173.2)	(104.1)	1	1999 сс	3703 сс	5.5 bar	1.3-2.0 sec





Spring-Return Aluminum Housing Pneumatic Actuators

For valve models beginning \boldsymbol{K} or $\boldsymbol{3DVK}$



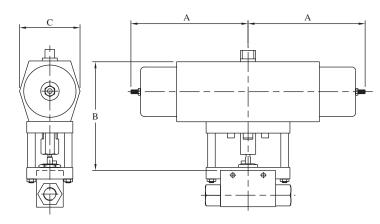


Figure 1 Figure 2

Maximum Air Pressure: 150 PSI (10 bar)

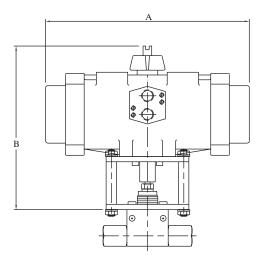
Operating Temperature Range: -20 to 175° F (-29 to 79° C)			Air Consumption	Required	Opening/				
Valve	Actuator		Dimensional	Data		per Stroke	Air	Closing	
Model	Model	A	В	C	Fig.	(Free Air)	Pressure	Time	
К3	D 4 05 1 CD	4.65"	5.53"	2.60"	1	51.0 cu in	80 PSI	1	
K3	RA051SR	(118.1)	(140.5)	(66.0)	1	836 cc	5.5 bar	1 sec	
K63	D 4 05 1 CD	4.65"	5.53"	2.60"	1	51.0 cu in	80 PSI	1 sec	
K03	RA051SR	(118.1)	(140.5)	(66.0)	1	836 cc	5.5 bar	1 860	
K103	RA051SR	4.65"	5.53"	2.60"	1	51.0 cu in	80 PSI	1 sec	
K103	KAUSISK	(118.1)	(140.5)	(66.0)	1	836 cc	5.5 bar	1 860	
K104	RC10SR	5.70"	6.08"	2.60"	1	51.0 cu in	80 PSI	1 sec	
K104	KC105K	(144.8)	(154.4)	(66.0)	1	836 cc	5.5 bar	1 800	
K106	RC10SR	5.70"	6.08"	2.60"	1	51.0 cu in	80 PSI	1 sec	
K100	KC105K	(144.8)	(154.4)	(66.0)	1	836 cc	5.5 bar	1 SCC	
K108	RC30SR	7.70"	7.00"	4.10"	2	122.0 cu in	80 PSI	1.5-2.0 sec	
K108	KC303K	(195.6)	(177.8)	(104.1)		1999 сс	5.5 bar	1.3-2.0 800	
K204	RC10SR	5.70"	7.00"	4.10"	1	51.0 cu in	80 PSI	1 sec	
K204	KC105K	(144.8)	(177.8)	(104.1)	1	836 cc	5.5 bar		
K206	RC10SR	5.70"	6.08"	2.60"	1	51.0 cu in	80 PSI	1 sec	
K200	RC105R	(144.8)	(154.4)	(66.0)	1	836 cc	5.5 bar	1 500	
3DVK34	RA051SR	4.65"	5.60"	2.60"	1	51.0 cu in	80 PSI	1 sec	
3D V K34	KAUSISK	(118.1)	(142.2)	(66.0)	1	836 cc	5.5 bar	1 Sec	
3DVK63	RA051SR	4.65"	5.60"	2.60"	1	51.0 cu in	80 PSI	1 sec	
3D V K03	KAUJISK	(118.1)	(142.2)	(66.0)	1	836 cc	5.5 bar	1 sec	
3DVK93	RC10SR	4.65"	5.60"	2.60"	1	51.0 cu in	80 PSI	1 sec	
3DVK93	KC105K	(118.1)	(142.2)	(66.0)	1	836 cc	5.5 bar	1 800	
3DVK106	RC30SR	7.70"	7.07"	4.10"	1	122.0 cu in	80 PSI	1.5-2.0 sec	
3D V K100	KC303K	(195.6)	(179.6)	(104.1)	1	1999 сс	5.5 bar	1.3-2.0 800	
3DVK108	RC40SR	7.70"	6.47"	4.10"	2	244.0 cu in	80 PSI	1.5-2.0 sec	
3D V K 100	KC405K	(195.6)	(164.3)	(104.1)		3998 сс	5.5 bar	1.3-2.0 SCC	
3DVK123	RC10SR	5.70"	5.78"	2.60"	1	32.0 cu in	80 PSI	1 sec	
3D V K123	KC105K	(144.8)	(146.8)	(66.0)	1	524 cc	5.5 bar	1 800	
3DVK203	RC20SR	5.70"	5.51"	2.87"	2	64.0 cu in	80 PSI	1 000	
3D V K203	KC203K	(144.8)	(140.0)	(72.9)		1049 cc	5.5 bar	1 sec	
3DVK206	RC30SR	7.70"	7.00"	4.10"	1	122.0 cu in	80 PSI	1.5-2.0 sec	
3D v K200	KCJUSK	(195.6)	(177.8)	(104.1)	1	1999 сс	5.5 bar	1.3-2.0 800	

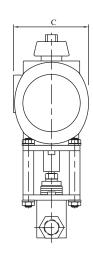




Double-Acting Stainless Steel Housing Pneumatic Actuators

For valve models beginning \boldsymbol{K} or $\boldsymbol{3DVK}$





Operating	Temperature	Range:	-20 to	175° F	(-29 to 79° C)	
Operating	Temperature	range.	-20 to	1/3 1	(- <u>4</u> 2 tO 12 C)	1

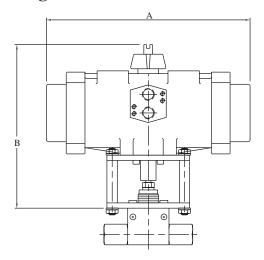
Operating Temperature Range. 20 to 175 T (25 to 75 C)						mption per	Required	Opening/
Valve	Actuator	Di	imensional D		Stroke (1		Air	Closing
Model	Model	A	В	C	Open	Close	Pressure	Time
K34	RA11DASS	4.19"	6.85"	3.15"	9.0 cu in	7.5 cu in	15 PSI	0.15 sec
KSŦ	KATIDASS	(106.4)	(174.0)	(80.0)	147 cc	123 cc	1.0 bar	0.13 sec
K63	RA11DASS	4.19"	6.85"	3.15"	9.0 cu in	7.5 cu in	15 PSI	0.15 sec
K03	KATIDASS	(106.4)	(174.0)	(80.0)	147 cc	123 cc	1.0 bar	0.13 sec
K103	RA11DASS	4.19"	6.85"	3.15"	9.0 cu in	7.5 cu in	20 PSI	0.15 sec
K105	KATIDASS	(106.4)	(174.0)	(80.0)	147 cc	123 cc	1.4 bar	0.13 860
K104	RA11DASS	4.19"	6.98"	3.15"	9.0 cu in	7.5 cu in	20 PSI	0.15 and
K104	KATIDASS	(106.4)	(177.3)	(80.0)	147 cc	123 cc	1.4 bar	0.15 sec
K106	RA11DASS	4.19"	6.98"	3.15"	9.0 cu in	7.5 cu in	30 PSI	0.15 sec
K100	KATIDASS	(106.4)	(177.3)	(80.0)	147 cc	123 cc	2.1 bar	0.13 860
V100	DAMIDAGG	7.00"	7.23"	3.82"	19.5 cu in	17.0 cu in	50 PSI	
K108	RA21DASS	(177.8)	(183.6)	(97.0)	320 cc	279 сс	3.4 bar	0.33 sec
K204	DA11DACC	4.19"	6.98"	3.15"	9.0 cu in	7.5 cu in	30 PSI	0.15 sec
K204	RA11DASS	(106.4)	(177.3)	(80.0)	147 cc	123 cc	2.1 bar	0.13 SCC
K206 RA111	RA11DASS	4.19"	6.98"	3.15"	9.0 cu in	7.5 cu in	40 PSI	0.15 sec
K200	KATIDASS	(106.4)	(177.3)	(80.0)	147 cc	123 cc	2.8 bar	0.13 sec
3DVK34	RA11DASS	4.19"	6.85"	3.15"	9.0 cu in	7.5 cu in	20 PSI	0.15 sec
3DVK34	KATIDASS	(106.4)	(174.0)	(80.0)	147 cc	123 cc	1.4 bar	0.13 860
3DVK63	RA11DASS	4.19"	6.85"	3.15"	9.0 cu in	7.5 cu in	20 PSI	0.15 sec
3D V K03	KATIDASS	(106.4)	(174.0)	(80.0)	147 cc	123 cc	1.4 bar	0.13 860
3DVK93	RA11DASS	4.19"	6.85"	3.15"	9.0 cu in	7.5 cu in	20 PSI	0.15 sec
3D V K93	KATIDASS	(106.4)	(174.0)	(80.0)	147 cc	123 cc	1.4 bar	0.13 860
3DVK106	RA21DASS	7.00"	7.58"	3.82"	19.5 cu in	17.0 cu in	40 PSI	0.35 sec
3D V K 100	KA21DA33	(177.8)	(192.5)	(97.0)	320 cc	279 сс	2.8 bar	0.55 860
3DVK108	RA21DASS	7.00"	7.75"	3.82"	19.5 cu in	17.0 cu in	60 PSI	0.35 sec
3DVK106	KAZIDASS	(177.8)	(196.9)	(97.0)	320 cc	279 сс	4.1 bar	0.55 860
3DVK123	RA11DASS	4.19"	6.98"	3.15"	9.0 cu in	7.5 cu in	30 PSI	0.15 sec
3DVK123	KATIDASS	(106.4)	(177.3)	(80.0)	147 cc	123 cc	2.1 bar	0.13 860
3DVK203	RA11DASS	4.19"	6.98"	3.15"	9.0 cu in	7.5 cu in	50 PSI	0.15 sec
3D V K203	KATIDASS	(106.4)	(177.3)	(80.0)	147 cc	123 cc	3.4 bar	0.13 sec
3DVK206	RA21DASS	7.00"	7.58"	3.82"	19.5 cu in	17.0 cu in	50 PSI	0.35 sec
3D V K200	KA21DASS	(177.8)	(192.5)	(97.0)	320 cc	279 сс	3.4 bar	0.55 860

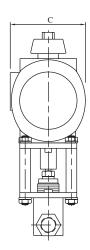




Spring-Return Stainless Steel Housing Pneumatic Actuators

For valve models beginning K or $\overrightarrow{3DVK}$





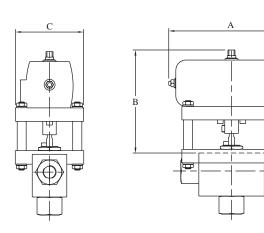
Operating Te	emperature Ra	ange: -20 to 1	79° C)	Air Consumption	Required	Opening/	
Valve	Actuator	Di	mensional D	ata	per Stroke	Air	Closing
Model	Model	A	В	С	(Free Air)	Pressure	Time
	RA11SRSS	5.87"	6.85"	3.15"	9.0 cu in	70 PSI	0.25 sec
K34		(149.1)	(174.0)	(80.0)	147 cc	4.8 bar	0.40 sec
17.62	DA11CDCC	5.87"	6.85"	3.15"	9.0 cu in	70 PSI	0.25 sec
K63	RA11SRSS	(149.1)	(174.0)	(80.0)	147 cc	4.8 bar	0.40 sec
IZ102	DA11CDCC	5.87"	6.85"	3.15"	9.0 cu in	75 PSI	0.25 sec
K103	RA11SRSS	(149.1)	(174.0)	(80.0)	147 cc	5.2 bar	0.40 sec
K104	RA11SRSS	5.87"	6.98"	3.15"	9.0 cu in	75 PSI	0.25 sec
K104	KAIISKSS	(149.1)	(177.3)	(80.0)	147 cc	5.2 bar	0.40 sec
K106	RA11SRSS	5.87"	6.98"	3.15"	9.0 cu in	80 PSI	0.25 sec
K100	KAIISKSS	(149.1)	(177.3)	(80.0)	147 cc	5.5 bar	0.40 sec
K108	RA31SRSS	11.50"	8.73"	4.92"	52.0 cu in	80 PSI	1.50 sec
K108	KASISKSS	(292.1)	(221.7)	(125.0)	852 cc	5.5 bar	2.00 sec
K204	RA11SRSS	5.87"	6.98"	3.15"	9.0 cu in	85 PSI	0.25 sec
K204	KAIISKSS	(149.1)	(177.3)	(80.0)	147 cc	5.9 bar	0.40 sec
K206	RA11SRSS	5.87"	6.98"	3.15"	9.0 cu in	90 PSI	0.25 sec
K200	KATISKSS	(149.1)	(177.3)	(80.0)	147 cc	6.2 bar	0.40 sec
3DVK34	RA11SRSS	5.87"	6.85"	3.15"	9.0 cu in	70 PSI	0.25 sec
3D V K34	KATISKSS	(149.1)	(174.0)	(80.0)	147 cc	4.8 bar	0.40 sec
3DVK63	RA11SRSS	5.87"	6.85"	3.15"	9.0 cu in	70 PSI	0.25 sec
3D V K03	KATISKSS	(149.1)	(174.0)	(80.0)	147 cc	4.8 bar	0.40 sec
3DVK93	RA11SRSS	5.87"	6.85"	3.15"	9.0 cu in	75 PSI	0.25 sec
3B (R)3	RATITIONS	(149.1)	(174.0)	(80.0)	147 cc	5.2 bar	0.40 sec
3DVK106	RA31SRSS	11.50"	9.18"	4.92"	52.0 cu in	75 PSI	1.50 sec
3D V K100	10.13.15100	(292.1)	(233.2)	(125.0)	852 cc	5.2 bar	2.00 sec
3DVK108	RA31SRSS	11.50"	9.25"	4.92"	52.0 cu in	80 PSI	1.50 sec
3D V K100	101315105	(292.1)	(235.0)	(125.0)	852 cc	5.5 bar	2.00 sec
3DVK123	RA11SRSS	5.87"	6.98"	3.15"	9.0 cu in	80 PSI	0.25 sec
315 (11123	1011101000	(149.1)	(177.3)	(80.0)	147 cc	5.5 bar	0.40 sec
3DVK203	RA21SRSS	8.74"	7.57"	3.82"	19.5 cu in	75 PSI	0.50 sec
32 (11203	10.12101000	(222.0)	(192.3)	(97.0)	320 cc	5.2 bar	1.00 sec
3DVK206	RA31SRSS	11.50"	9.08"	4.92"	52.0 cu in	80 PSI	1.50 sec
3D V K200	KAJISKSS	(292.1)	(230.6)	(125.0)	852 cc	5.5 bar	2.00 sec





DOUBLE-ACTING ALUMINUM HOUSING PNEUMATIC ACTUATORS

For valve models beginning 3K



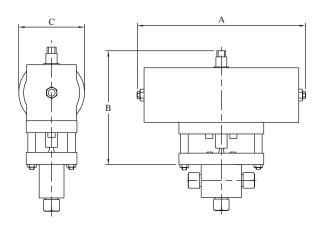


Figure 1

Figure 2

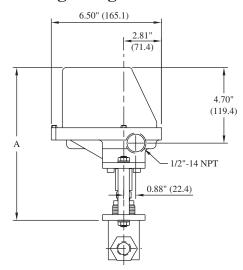
Operating Temperature Range: -20 to 175° F (-29 to 79° C)					Air Consu	mption per	Required	Opening/	
Valve	Actuator]	Dimensional	Data		Stroke (I	Free Air)	Air	Closing
Model	Model	A	В	C	Fig.	Open	Close	Pressure	Time
3K34	ADA180	6.69"	4.87"	2.69"	1	34.8 cu in	52.8 cu in	80 PSI	< 1 sec
3K34		(169.9)	(123.7)	(68.3)	1	570 cc	865 cc	5.5 bar	< 1 Sec
3K63	ADA180	6.69"	4.87"	2.69"	1	34.8 cu in	52.8 cu in	80 PSI	< 1 sec
3103	ADATOU	(169.9)	(123.7)	(68.3)	1	570 cc	865 cc	5.5 bar	< 1 sec
3K93	ADA180	6.69"	4.87"	2.69"	1	34.8 cu in	52.8 cu in	80 PSI	< 1 sec
313	ADATOU	(169.9)	(123.7)	(68.3)	1	570 cc	865 cc	5.5 bar	\ 1 SCC
3K123	ADA180	6.69"	4.93"	2.69"	1	34.8 cu in	52.8 cu in	80 PSI	< 1 sec
3K123	ADATOU	(169.9)	(125.2)	(68.3)	1	570 cc	865 cc	5.5 bar	< 1 Sec
3K106	ADA180	6.69"	5.70"	2.69"	1	34.8 cu in	52.8 cu in	80 PSI	< 1 sec
3K100	ADATOO	(169.9)	(144.8)	(68.3)	1	570 cc	865 cc	5.5 bar	< 1 sec
3KOS108	AHDA180	10.92"	6.87"	3.25"	2	128.8 cu in	128.8 cu in	80 PSI	< 1 sec
3KO3100	AIIDAIOO	(277.4)	(174.5)	(82.6)		2111 cc	2111 cc	5.5 bar	< 1 sec
3K206	ADA180	6.69"	5.70"	2.69"	1	34.8 cu in	52.8 cu in	80 PSI	< 1 sec
3K200	ADATOU	(169.9)	(144.8)	(68.3)	1	570 cc	865 cc	5.5 bar	< 1 scc
3K203	ADA180	6.69"	4.93"	2.69"	1	34.8 cu in	52.8 cu in	80 PSI	< 1 sec
311203	71100	(169.9)	(125.2)	(68.3)	1	570 cc	865 cc	5.5 bar	< 1 SCC

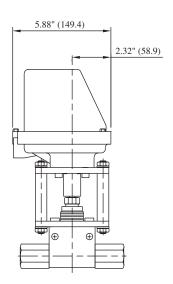




90° Uni-directional Electric Actuators

For valve models beginning \boldsymbol{K} or $3\boldsymbol{K}$





Valve Model	110/120 VAC 50/60 Hz	210/220 VAC 50/60 Hz	A	Opening/ Closing Time
K34	WE110	WE220	8.19" (208.0)	5 sec
K63 / K103	WE110	WE220	8.19" (208.0)	5 sec
K104 / KW204	WE110	WE220	8.19" (208.0)	5 sec
K106 / KW206	WE110	WE220	8.19" (208.0)	5 sec
KOS108	WHE110	WHE220	8.10" (205.7)	9 sec
3K34	WE110	WE220	8.19" (208.0)	5 sec
3K63 / 3K93	WE110	WE220	8.19" (208.0)	5 sec
3K123	WE110	WE220	8.19" (208.0)	5 sec
3K203	WE110	WE220	8.00" (203.2)	5 sec
3K106 / 3K206	WE110	WE220	8.25" (209.6)	5 sec
3KOS108	WHE110	WHE220	8.10" (205.7)	9 sec

Operating Temperature Range: 0 to 150° F (-18 to 65° C)





2-WAY TRUNNION VALVE

BuTech offers a 2-way trunnion valve for severe high cycle applications. These valves are constructed of the same materials as our 3-way diverting and switching valves and are designed to operate in temperatures of -20 to 400° F (-28 to 204° C). For operating at temperatures up to 550° F (288° C), specify our high temperature option (see page BV-2).

Features:

- Pressures to 20,000 PSI (1380 bar) at 72°F (22°C)
- Pressure loaded seats assure positive sealing
- Blowout-proof stem provides maximum safety
- Choice of replaceable connections for installation versatility
- Double-ended trunnion mounted ball
- Reinforced PEEK trunnion bearings and high-temperature o-rings for temperatures up to 550°F (288°C)
- Bi-directional flow capabilities

Available Models:

Model No.	Maximum F	ressure*	P	ort	Cv	Page
3K341	3,000 PSI	210 bar	0.250"	(6.4 mm)	1.40	BV-21
3K631	6,000 PSI	410 bar	0.187"	(4.7 mm)	0.75	BV-22
3K931	10,000 PSI	690 bar	0.187"	(4.7 mm)	0.75	BV-24
3K1061	10,000 PSI	690 bar	0.375"	(9.5 mm)	3.40	BV-26
3KOS1081	10,000 PSI	690 bar	0.500"	(12.7 mm)	10.00	BV-28
3K1231	12,000 PSI	830 bar	0.187"	(4.7 mm)	0.75	BV-30
3K2031	20,000 PSI	1380 bar	0.187"	(4.7 mm)	0.75	BV-32
3K2061	20,000 PSI	1380 bar	0.375"	(9.5 mm)	3.40	BV-34

