

JASH HONOTE AND HOS

# Mono-T Bonneted KNIFE GATE Valve



#### Mono-T Bonneted Knife Gate Valve AWWA C520 MSS-SP81

PMP-Weco bonneted Mono series are designed in compliance with the latest AWWA C520 standard for knife gate valves. The Weco Armaturen design offers a unique O-ring stem seal design eliminating emissions and foul odours to the atmosphere.

Meeting the German standard TA-Luft VDI 2440 for stem sealing to atmosphere, the PMP-Weco series of bonneted knife gate valves offers low operating toques, and low maintenance even after thousands of operating cycles.

PMP-Weco Knife Gate Valves are manufactured to MSS SP 81, TIS-405-8 & AWWA C520 standards. Flange dimensions conform to ANSI B16.5 class 150, 3" to 24", face to face dimensions conform to MSS SP 81 standard.

Mono-T series are manufactured as one piece with integral bonnet design to 6" size. Valve sizes 8" to 24" have a boletd bonnet.

Resilient O-rings and seat materials are NSF 61 certified.

Rising and non-rising stem designs are available.

Due to low operating torques, manual hand wheel operators are supplied as standard on valves to 24" sizes. Optional manual gear, AWWA square nut, pneumatic, hydraulic and electric operators with accessories are available.







### Mono-T Bonneted Knife Gate Valve Features and Benefits

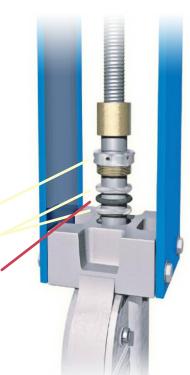
- Cast body eliminates potential leak paths.
- Bonnet style body eliminates leakage through the stem area at full design pressures and limits exposing the gate to the atmosphere, odours are contained.
- Unique "O" ring stem seal assembly eliminates the need for a stuffing box, reduces operating torque and maintenance requirements with higher cycle life.
- In addition, it is compliant with TA-Luft emission leakage standards.
- Precision water jet cut beveled 360° gate edge, easily cuts through debris or build up.
- · Variety of seat materials offers flexibility for specific applications: Metal, Buna-N, EPDM, Viton, PTFE.
- Retained seat will not pull out under full design pressure.
- Corrosion resistant stainless steel stem with large pitch thread offers quick opening and closing of the valve.
- Rising and non-rising stems are available.
- Purge ports offer flexibility to purge body chest cavity, or to monitor pressure.
- V-Port inserts are available for control applications with either electric or pneumatic actuation.
- Optional accessories: AWWA manual bevel gear operators, shaft extensions, floor stands, wall brackets, deflector cones for slurry and abrasive applications, actuation for on-off or modulating services, solenoid valves, limit switches, speed controls, actuators and chain wheel operators.

Unique Stainless Steel stem seal assembly uses a thrust nut retainer

with two Stainless Steel scraper ring thrust washers

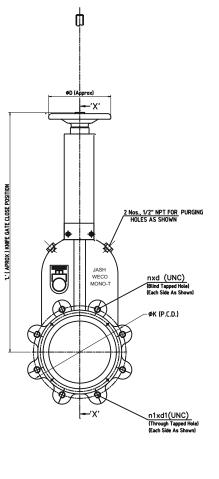
compressing a standard "O" ring meets NSF 61 standards

eliminating historical leaking of the packing gland

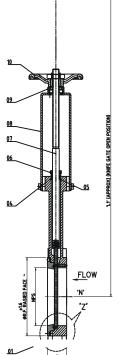




#### Mono-T Bonneted Knife Gate Valve Manual Operated | Rising Stem 3" - 6"



DETAIL VIEW 'Z'



Resilient Seat

Flange Standard ANSI B16.5 Class 150 Valve Design: B16.34, AWWA C520-10, MSS-SP81 CRN CSA-OC 15663.567890

NPS									
Inches	А	n x d x Deep (Min.)	n1 x d1	K	В	С	D	R	R.F
3	2.00	2Nos. x 5/8" x 0.38"	2Nos. x 5/8"	6.00	19.00	23.00	8.00	3.75	5.00
4	2.00	2Nos. x 5/8" x 0.5"	6Nos. x 5/8"	7.50	21.00	26.00	8.00	4.50	6.20
6	2.25	2Nos. x 3/4" x 0.6"	6Nos. x 3/4"	9.50	26.00	32.50	8.00	5.50	8.45

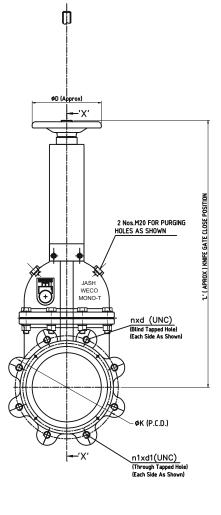
SR.No.	Description	Material
01	Body	ASTM A 351 Gr CF:8M/CF8
02	Seal Retainer Ring	ASTM A 351 Gr CF:8M/CF8
03	Knife Gate	ASTM A 240 Gr.: 304/316
04	Slotted Head Grub Screw	Stainless Steel Gr. 316/304
05	'O' Ring for Stuffing Box	EPDM / Viton (NSF Certified)
05A	'O' Ring for (S.R. Ring & Gate)	EPDM / Viton (NSF Certified)
05B	'O' Ring for (S.R. Ring & Housing)	EPDM / Viton (NSF Certified)
06	Spacer (Lower & Upper)	Stainless Steel Gr. 304
07	Sealing Nut	ASTM A 276 Gr.: 304
08	Stem (Rising)	ASTM A 276 Gr.: 304/316
09	Supporting Bracket	Carbon Steel Painted / Stainless Steel
10	Adapter Plate	Carbon Steel Painted / Stainless Steel
14C/D	Hand Wheel	Ductile Iron / Carbon Steel







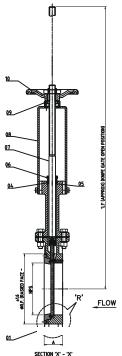
#### Mono-T Bonneted Knife Gate Valve Manual Operated | Rising Stem 8" - 24"



DETAIL VIEW 'Z'



NPS									
Inches	А	n x d x Deep (Min.)	n1 x d1	K	В	С	D	R	R.F
8	2.75	2Nos. x 3/4" x 0.6"	6Nos. x 3/4"	11.75	30.50	39.00	8.00	6.75	10.60
10	2.75	4Nos. x 7/8" x 0.6"	8Nos. x 7/8"	14.25	36.50	47.00	12.40	8.00	12.76
12	3.00	4Nos. x 7/8" x 0.6"	8Nos. x 7/8"	17.00	42.00	54.50	12.40	9.50	15.00
14	3.00	4Nos. x 1.0" x 0.78"	8Nos. x 1.0"	18.75	48.00	62.50	12.40	10.50	16.25
16	3.50	6Nos. x 1.0" x 0.78"	10Nos. x 1.0"	21.25	52.95	69.29	12.40	12.00	18.50
18	3.50	6Nos. x 1-1/8" x 0.86"	10Nos. x 1-1/8"	22.75	59.00	79.00	12.40	12.50	21.00
20	4.50	8Nos. x 1-1/8" x 0.86"	12Nos. x 1-1/8"	25.00	63.50	83.50	15.75	13.80	23.00
24	4.50	8Nos. x 1-1/4"" x 1.0"	12Nos. x 1-1/4"	29.50	77.00	100.98	15.75	16.00	27.20



Resilient Seat

SR.No.	Description	Material
01	Body (Split Type)	ASTM A 351 Gr CF:8M/CF8
02	Seal Retainer Ring	ASTM A 351 Gr CF:8M/CF8
03	Knife Gate	Stainless Steel, ASTM A240 Gr. 316
04	Slotted Head Grub Screw	Stainless Steel Gr. 316/304
05	'O' Ring for Stuffing Box	EPDM / Viton (NSF Certified)
05A	'O' Ring for (S.R. Ring & Gate)	EPDM / Viton (NSF Certified)
05B	'O' Ring for (S.R. Ring & Housing)	EPDM / Viton (NSF Certified)
06	Spacer (Lower & Upper)	Stainless Steel Gr. 304
07	Sealing Nut	ASTM A 276 Gr.: 304
08	Stem (Rising)	ASTM A 276 Gr.: 304/316
09	Supporting Bracket	Carbon Steel Painted / Stainless Steel
10	Adapter Plate	Carbon Steel Painted / Stainless Steel
11	Gasket for Bonnet	EPDM (NSF Certified)
14C/D	Hand Wheel	Ductile Iron / Carbon Steel



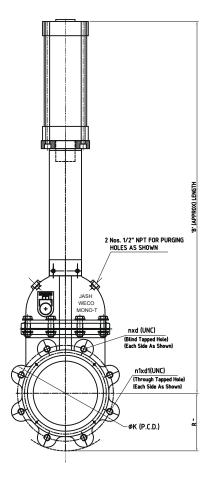


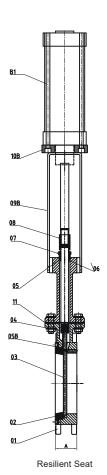
PMP Precision Valve Company Ltd. is a progressive supplier of current products. The features, materials of construction and dimensional data as detailed in this bulletin are intended for your reference only and should not be relied upon unless confirmed in writing by PMP Precision VAlve Co. Ltd. Certified dimensional drawings are available upon order receipt.



# Mono-T Bonneted Knife Gate Valve Pneumatic Operated 3" - 24"

Flange Standard ANSI B16.5 Class 150 Valve Design: B16.34, AWWA C520-10, MSS-SP81 CRN CSA-OC 15663.567890





NPS				Tap Size	B.C.		Actuator
Inches	А	Bolt Hole	No.	UNC	K	В	O*
3	2.00	0.75	4	5/8"x11	6.00	24.60	2.50
4	2.00	0.75	8	5/8"x11	7.50	28.00	3.00
6	2.25	0.88	8	3/4"x10	9.50	35.65	4.00
8	2.75	0.88	8	3/4"x10	11.75	47.10	5.00
10	2.75	1.00	12	7/8"x9	14.25	54.50	5.00
12	3.00	1.00	12	7/8"x9	17.00	63.80	6.00
14	3.00	1.12	12	1"x8	18.75	72.50	8.00
16	3.50	1.12	16	1"x8	21.25	80.50	8.00
18	3.50	1.25	16	1-1/8"x7	22.75		
20	4.50	1.25	20	1-1/8"x7	25.00		
24	4.50	1.38	20	1-1/4"x7	29.50		

SR.No.	Description	Material
B1	Pneumatic cylinder	"Schrader" / "Equi." make
11	Gasket for bonnet	EPDM (NSF Certified)
10B	Adapter plate	Carbon Steel painted / Stainless Steel
09B	Supporting bracket	Carbon Steel painted / Stainless Steel
08	Connecting rod	ASTM A 276 Gr. : 304/316
07	Sealing nut	ASTM A 276 Gr. : 304
06	Spacer (lower & upper)	Stainless Steel Gr.: 304
05B	'O' Ring for (S.R. Ring & Housing)	EPDM (NSF Certified)
05	'O' Ring for stuffing box	EPDM (NSF Certified)
04	Slotted head grub screw	Stainless Steel Gr.: 316/304
03	Knife gate	LDX 2101
02	Seal retainer ring	ASTM A 351 Gr CF:8M/CF8
01	Housing / Body (Split type)	ASTM A 351 Gr CF:8M/CF8







## Mono Knife Gate Valve Design and Maximum Working Pressures

SIZ	ZE	DESIGN TEST PRESSURES				
		BODY	SE	SEAT		
			HIGH	LOW		
INCHES	MM	PSI	PSI	PSI		
3"	80	225	150	5		
4"	100	225	150	5		
6"	150	225	150	5		
8"	200	225	150	5		
10"	250	225	150	5		
12'	300	225	150	5		
14"	350	225	150	5		
16"	400	225	150	5		
18"	450	225	150	5		
20"	500	225	150	5		
24"	600	225	150	5		

Design: AWWA C520-14, MSS SP 81

SIZE		MAXIMUM WORKING PRESSURES
		FLOW DIRECTION
		PREFERRED
INCHES	MM	PSI
3"	80	150
4"	100	150
6"	150	150
8"	200	150
10"	250	150
12'	300	150
14"	350	150
16"	400	150
18"	450	150
20"	500	150
24"	600	150

Design: AWWA C520-14, MSS SP 81



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