

Date: 9/13/22
Subject: Packed Line Valve Release Notification

As previously announced earlier this year, Mueller Refrigeration will launch a design change to the Packed Line Valve product line featuring the following improvements:

- Increased UL pressure rating from 700 psi to 900 psi, providing valves that can be used in 62 Bar (900 psi) CO2 applications
- Offering expanded to include valves in Transcritical CO2, 140 bar applications
- Increased flow rates will result on several valves. Others will have the same flow as the current design
- Sealing/shutoff for the new design will be the same as the current design
- Increased cycle life and less torque to seal will result in reduced maintenance costs

This design change will result in part number and dimensional data indicated in the attached chart.

The initial release will include a limited number of valves on October 1, 2022:

Packed Angle Valves, NPTFE Inlet to Flare

<u>Current Product</u>	<u>900 psi Valves</u>	<u>140 bar Valves</u>
A 16472	AV1H-FA21A	AV1X-FA21A
B 33964	N/A	AV1X-FA21A

Packed Angle Valves, Solder to Flare

<u>Current Product</u>	<u>900 psi Valves</u>	<u>140 bar Valves</u>
A 17502	AV1H-RA22B	AV1X-RA23B
AA17502	AV1H-RA22E	<i>Bulk Packed not available</i>
A 19042	N/A	AV1X-RA23B
B 34542	N/A	AV1X-RA23B
A 17503	N/A	AV1X-SB26B
AA17803	N/A	AV1X-SB26B
B 34255	AV1H-SB23C	AV1X-SB26B
B 34288	N/A	AV1X-SB26B

Transducer Valves, NPTFI x NPTFE

<u>Current Product</u>	<u>900 psi Valves</u>	<u>140 bar Valves</u>
B 34254	AV3H-FK25D	AV3X-FK27D

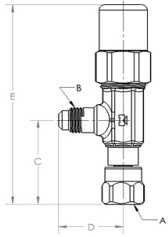
Transducer Valves, NPTFI x ODS

<u>Current Product</u>	<u>900 psi Valves</u>	<u>140 bar Valves</u>
B 35162	AV3H-NK25J	AV3X-NK27H

Pricing can be requested for the valves included in the initial release through your sales or customer service representatives.

Please contact your Mueller Sales Representative if you require further information.

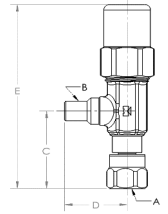
Packed Line Valves, Angle Non-Backseating



Internal Swivel Flare to Flare

Current Design								New Design								
Part Number	A (in)	B (in)	C (in)	D (in)	E (in)		Wt (lb)	Part Number	Release Date	A (in)	B (in)	C (in)	D (in)	E (in)		Wt (lb)
A 17429	1/4	1/4	1.47	1.06	3.90		0.23	AV1H-XA11A		1/4	1/4	1.47	1.06	3.90		0.34
B 34247	1/4	1/4	1.47	1.06	3.49		0.34	AV1H-XA21A		1/4	1/4	1.47	1.06	3.50		0.34
B 35396	3/8	1/4	1.52	1.06	3.54		0.38	AV1H-YA21A		3/8	1/4	1.52	1.06	3.55		0.39
A 17474	3/8	3/8	1.52	1.12	3.55		0.27	AV1H-YB21A		3/8	3/8	1.52	1.11	3.55		0.40
AA17474	3/8	3/8	1.52	1.12	3.55		0.42	AV1H-YB21D		3/8	3/8	1.52	1.11	3.55		0.40

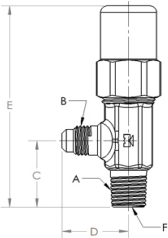
140 bar Valve	
Part Number	Release Date
N/A	
AV1X-XA21A	
N/A	
AV1X-YB21A	
N/A	



Internal Swivel Flare to Solder

Current Design								New Design								
Part Number	A (in)	B (in)	C (in)	D (in)	E (in)		Wt (lb)	Part Number	Release Date	A (in)	B (in)	C (in)	D (in)	E (in)		Wt (lb)
B 35519	1/4	1/4	1.47	1.06	3.50		0.33	AV1H-XR21B		1/4	1/4	1.47	1.06	3.50		0.34

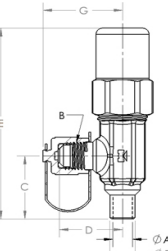
140 bar Valve	
Part Number	Release Date
N/A	



NPTFE Inlet to Flare

Current Design								New Design								
Part Number	A (in)	B (in)	C (in)	D (in)	E (in)		Wt (lb)	Part Number	Release Date	A (in)	B (in)	C (in)	D (in)	E (in)		Wt (lb)
A 16472	1/4	1/4	1.00	0.94	3.02		0.29	AV1H-FA21A	10/1/2022	1/4	1/4	1.00	0.94	3.02		0.33
A 11031D	1/4	1/4	1.00	0.94	3.02		0.29	AV1H-FA21B		1/4	1/4	1.00	0.94	3.02		0.33
B 33964	1/4	1/4	1.00	0.94	3.02		0.31	AV1H-FA23A		1/4	1/4	1.00	0.94	3.02		0.33
A 11030	1/4	3/8	1.06	1.12	3.08		0.25	AV1H-GB21A		1/4	3/8	1.06	1.11	3.08		0.32
A 13613	3/8	1/4	1.12	1.06	3.14		0.33	AV2H-HA21A		3/8	1/4	1.12	1.06	3.14		0.33
A 13503	3/8	3/8	1.12	1.12	3.14		0.34	AV2H-HB21A		3/8	3/8	1.12	1.11	3.14		0.34
A 11042	3/8	1/2	1.38	1.38	3.77		0.51	N/A								

140 bar Valve	
Part Number	Release Date
AV1X-FA21A	10/1/2022
N/A	
AV1X-FA21A	10/1/2022
AV1X-GB21A	
N/A	
N/A	
N/A	

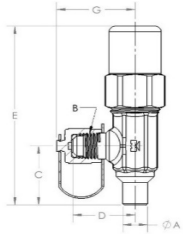


Solder to Flare

Current Design								New Design								
Part Number	A (in)	B (in)	C (in)	D (in)	E (in)		Wt (lb)	Part Number	Release Date	A (in)	B (in)	C (in)	D (in)	E (in)	G (in)	Wt (lb)
A 17502	1/4	1/4	1.03	0.94	3.05		0.30	AV1H-RA22B	10/1/2022	1/4^	1/4	1.00	0.94	3.02	1.16	0.30
AA17502	1/4	1/4	1.03	0.94	3.05		0.31	AV1H-RA22E	10/1/2022	1/4^	1/4	1.00	0.94	3.02	1.16	0.30
A 19042	1/4	1/4	1.03	0.94	3.05		0.30	AV1H-RA24B		1/4^	1/4	1.00	0.94	3.02	1.16	0.30
B 34252	1/4	1/4	1.03	0.94	3.05		0.31	AV1H-RA21B		1/4^	1/4	1.00	0.94	3.02	1.16	0.30
A 17913	3/8	1/4	1.00	0.94	3.02		0.30	AV1H-SA22B		3/8^	1/4	1.00	0.94	3.02	1.18	0.30
A 19044	3/8	1/4	1.00	0.94	3.02		0.31	AV1H-SA24B		3/8^	1/4	1.00	0.94	3.02	1.16	0.30
B 35284	3/8	3/8	1.00	1.12	3.02		0.25	AV1H-SB26C		3/8^	3/8	1.00	1.11	3.02	1.50	0.38
A 17503	3/8	3/8	1.00	1.12	3.02		0.39	AV1H-SB26C		3/8^	3/8	1.00	1.11	3.02	1.27	0.38
AA17503	3/8	3/8	1.00	1.12	3.02		0.39	AV1H-SB26F		3/8^	3/8	1.00	1.11	3.02	1.27	0.38
B 34255	3/8	3/8	1.00	1.12	3.02		0.37	AV1H-SB23C	10/1/2022	3/8^	3/8	1.00	1.11	3.02	1.27	0.38
B 34288	3/8	3/8	1.00	1.12	3.42		0.31	AV1H-SB13C		3/8^	3/8	1.00	1.11	3.02	1.27	0.38
A 19022	1/2	1/4	1.03	0.94	3.05		0.32	AV1H-TA24B		1/2^	1/4	1.00	0.94	3.03	1.10	0.33
A 19021	1/2	3/8	1.03	1.09	3.05		0.39	AV2H-TB26B		1/2^	3/8	1.00	1.11	3.03	1.50	0.39

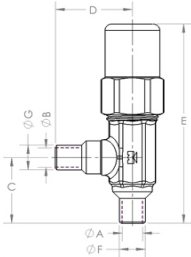
140 bar Valve	
Part Number	Release Date
AV1X-RA23B	10/1/2022
AV1X-RA23B*	10/1/2022
AV1X-RA23B	10/1/2022
AV1X-RA23B	10/1/2022
AV1X-SA23B	
N/A	
N/A	
AV1X-SB26B	10/1/2022
AV1X-SB26B	10/1/2022
AV1X-SB26B	10/1/2022
N/A	
N/A	

* Bulk Packed not available



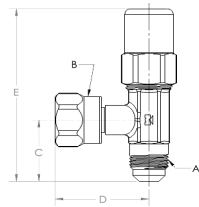
FTG to Flare

Current Design							New Design							140 bar Valve			
Part Number	A (in)	B (in)	C (in)	D (in)	E (in)	Wt (lb)	Part Number	Release Date	A (in)	B (in)	C (in)	D (in)	E (in)	G (in)	Wt (lb)	Part Number	Release Date
B 35494	3/8	1/4	1.03	0.94	3.43	0.22	AV1H-UA14B		3/8	1/4	1.03	0.94	3.42	1.18	0.26	N/A	



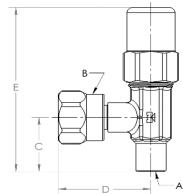
Solder to Solder

Current Design							New Design							140 bar Valve				
Part Number	A (in)	B (in)	C (in)	D (in)	E (in)	Wt (lb)	Part Number	Release Date	A (in)	B (in)	C (in)	D (in)	E (in)	F (in)	G (in)	Wt (lb)	Part Number	Release Date
B 35501	1/4^	1/4^	1.00	1.00	3.02	0.28	AV1H-RR21B		1/4^	1/4^	1.00	1.11	3.02	3/8	3/8	0.30	AV1X-RR21B	
B 35498	3/8^	3/8^	1.00	1.00	3.02	0.29	AV1H-SS21B		3/8^	3/8^	1.00	1.11	3.02	1/2	1/2	0.30	AV1X-SS21B	



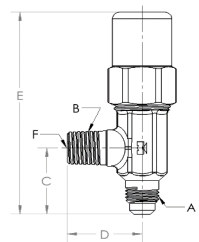
Flare to Internal Swivel Flare

Current Design							New Design							140 bar Valve		
Part Number	A (in)	B (in)	C (in)	D (in)	E (in)	Wt (lb)	Part Number	Release Date	A (in)	B (in)	C (in)	D (in)	E (in)	Wt (lb)	Part Number	Release Date
B 34768	3/8	3/8	1.12	1.52	3.14	0.27	AV1H-BY21A		3/8	3/8	1.12	1.53	3.14	0.41	N/A	



Solder to Internal Swivel Flare

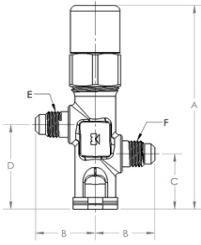
Current Design							New Design							140 bar Valve		
Part Number	A (in)	B (in)	C (in)	D (in)	E (in)	Wt (lb)	Part Number	Release Date	A (in)	B (in)	C (in)	D (in)	E (in)	Wt (lb)	Part Number	Release Date
B 35499	3/8	3/8	1.00	1.54	3.02	0.38	AV1H-SY21B		3/8	3/8	1.00	1.53	3.02	0.38	N/A	



Flare to NPTFE

Current Design							New Design							140 bar Valve		
Part Number	A (in)	B (in)	C (in)	D (in)	E (in)	Wt (lb)	Part Number	Release Date	A (in)	B (in)	C (in)	D (in)	E (in)	Wt (lb)	Part Number	Release Date
A 15073	1/4	1/4	0.94	1.00	2.96	0.43	AV1H-AF21A		1/4	1/4	0.99	1.00	3.01	0.30	N/A	

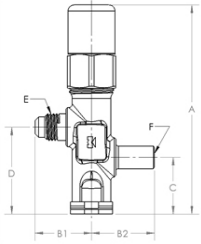
Packed Line Valves, Two-Way



Flare to Flare

Current Design									New Design									
Part Number	A (in)	B (in)	C (in)	D (in)	E (in)	F(in)		Wt (lb)	Part Number	Release Date	A (in)	B (in)	C (in)	D (in)	E (in)	F (in)		Wt (lb)
A 13591	3.46	1.00	0.94	1.44	1/4	1/4		0.43	AV4H-AA21A		3.47	0.95	0.94	1.44	1/4	1/4		0.46
B 33482	3.46	1.00	0.95	1.45	1/4	1/4		0.51										
A 13595	3.45	1.12	0.94	1.44	3/8	3/8		0.48	AV4H-BB21A		3.47	1.12	0.94	1.44	3/8	3/8		0.51
A 13592	3.45	1.25	0.94	1.44	1/2	1/2		0.50	AV4H-CC21A		3.47	1.25	0.94	1.44	1/2	1/2		0.53

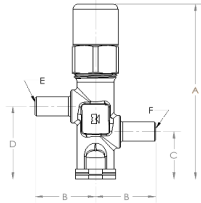
140 bar Valve	
Part Number	Release Date
AV4X-AA21B	
N/A	
N/A	



Solder to Flare

Current Design									New Design									
Part Number	A (in)	B1 (in)	C (in)	D (in)	B2 (in)			Wt (lb)	Part Number	Release Date	A (in)	B1 (in)	C (in)	D (in)	E (in)	F (in)	B2 (in)	Wt (lb)
B 35516	3.48	1.00	0.94	1.44	1.06			0.54	AV4H-RA21B		3.47	0.95	0.94	1.44	1/4	1/4^A	1.06	0.45
A 19041	3.50	1.12	0.95	1.50	1.25			0.56	AV4H-SB21B		3.47	1.11	0.94	1.44	3/8	3/8^A	1.12	0.48

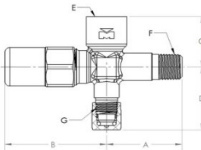
140 bar Valve	
Part Number	Release Date
AV4X-RA21B	
AV4X-SB21B	



Solder to Solder

Current Design									New Design									
Part Number	A (in)	B (in)	C (in)	D (in)				Wt (lb)	Part Number	Release Date	A (in)	B (in)	C (in)	D (in)	E (in)	F (in)		Wt (lb)
A 15580	3.45	1.06	0.94	1.44				0.51	AV4H-MM21B		3.47	1.06	0.94	1.44	1/4	1/4		0.45
A 15581	3.45	1.25	0.94	1.44				0.52	AV4H-NN21B		3.47	1.25	0.94	1.44	3/8	3/8		0.48
A 15582	3.46	1.25	0.94	1.44				0.54	AV4H-PP21B		3.47	1.25	0.94	1.44	1/2	1/2		0.51

140 bar Valve	
Part Number	Release Date
N/A	
N/A	
N/A	



Transducer Valves

NPTFI X NPTFE

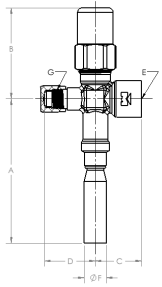
Current Design									New Design									
Part Number	A (in)	B (in)	C (in)	D (in)	E (in)	F (in)	G (in)	Wt (lb)	Part Number	Release Date	A (in)	B (in)	C (in)	D (in)	E (in)	F (in)	G (in)	Wt (lb)
B 34254	1.50	2.02	1.03	1.25	1/8	1/4	1/4	0.43	AV3H-FK25D	10/1/2022	1.50	2.02	1.03	1.25	1/8	1/4	1/4	0.45
A 19084	1.50	2.02	1.06	1.33	1/4	1/4	1/4	0.44	AV3H-FL23B		1.50	2.02	1.03	1.35	1/4	1/4	1/4	0.39
B 35334	1.50	2.40	1.06	1.33	1/4	1/4	1/4	0.34	AV3H-FL13H		1.50	2.40	1.03	1.35	1/4	1/4	1/4	0.39

140 bar Valve	
Part Number	Release Date
AV3X-FK27D	10/1/2022
AV3X-FL23A	
AV3X-FL23D	

NPTFI X ODS

Current Design									New Design									
Part Number	A (in)	B (in)	C (in)	D (in)	E (in)	F (in)	G (in)	Wt (lb)	Part Number	Release Date	A (in)	B (in)	C (in)	D (in)	E (in)	F (in)	G (in)	Wt (lb)
B 35162	1.50	2.02	1.00	1.28	1/8	3/8	1/4	0.43	AV3H-NK25J	10/1/2022	1.50	2.02	1.03	1.25	1/8	3/8	1/4	0.45
B 35593	1.47	2.02	1.06	1.13	1/4	3/8	1/4	0.44	AV3H-NL23H		1.50	2.02	1.03	1.35	1/4	3/8	1/4	0.46

140 bar Valve	
Part Number	Release Date
AV3X-NK27H	10/1/2022
AV3X-NL23H	



NPTFI X FTG EXT TUBE

Current Design									New Design									140 bar Valve		
Part Number	A (in)	B (in)	C (in)	D (in)	E (in)	F (in)	G (in)	Wt (lb)	Part Number	Release Date	A (in)	B (in)	C (in)	D (in)	E (in)	F (in)	G (in)	Wt (lb)	Part Number	Release Date
B 35514	3.19	2.02	1.03	1.13	1/8	1/2	1/4	0.45	AV3H-VK25J		3.19	2.02	1.03	2.16	1/8	1/2	1/4	0.47	N/A	

FTG to Flare

Current Design									New Design									140 bar Valve		
Part Number	A (in)	B (in)	C (in)	D (in)	E (in)	F (in)	G (in)	Wt (lb)	Part Number	Release Date	A (in)	B (in)	C (in)	D (in)	E (in)	F (in)	G (in)	Wt (lb)	Part Number	Release Date
B 34542	3/8	1/4	1.03	0.94	3.43		1.18	0.23	AV1H-UA14E		3/8	1/4	1.03	0.94	3.42		1.18	0.26	AX1X-UA27B	

FTG EXT TUBE X FLARE

Current Design									New Design									140 bar Valve		
Part Number	A (in)	B (in)	C (in)	D (in)	E (in)	F (in)	G (in)	Wt (lb)	Part Number	Release Date	A (in)	B (in)	C (in)	D (in)	E (in)	F (in)	G (in)	Wt (lb)	Part Number	Release Date
B 35512	1/2	1/4	2.69	1.03	4.71		1.12	0.33	AV1H-VA22B		1/2	1/4	2.71	0.94	4.73		1.19	0.34	N/A	

