



# **Gate-Style DEMCO Valves**

Dependability, inline repairability, flexible trim options, and drop-tight position shutoff

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Oklahoma City, Oklahoma, USA.

# Introduction

Cameron is a leading provider of valves, valve automation, and measurement systems to the oil and gas industry. Our products are primarily used to control, direct, and measure the flow of oil and gas as it is moved to refineries, petrochemical plants, and industrial centers for processing. We provide valve products that are sold through distributor networks worldwide. Our products are used in oil and gas and industrial applications and include widely recognized brands such as DEMCO\* valves; NAVCO\* floating ball valves; NEWCO\* gate, globe, and check valves; DOUGLAS CHERO\* forged-steel gate, globe, and check valves; NUTRON\* ball valves; TOM WHEATLEY\* check valves; WHEATLEY\* check valves; and WKM\* valves.

Designed for dependable, heavy-duty performance in abrasive and corrosive service conditions, butterfly-style DEMCO valves are commonly selected for a number of oilfield applications, including drilling and production.

# Series DM Gate Valves

Series DM gate valves, the premier gate valve in the oil and gas drilling market, are specifically engineered for the rigorous requirements of oilfield applications. Designed for dependable, heavy-duty performance in abrasive service conditions, Series DM gate valves are commonly selected for a number of oilfield applications, including

- drilling standpipe manifold
- pump manifold block valves
- high-pressure mud mixing lines
- high-pressure drilling system block valves.

The Series DM gate valves are available in ASME Classes 600, 900, and 1500. They also are available in 5,000-psi gauge pressure and 7,500-psi gauge pressure (not API monogrammed).

## Features and benefits

#### Inline field repairability

The bonnet is easily removed for internal parts inspection, replacement, or both without removing the valve from the line. This design simplicity permits fast and easy service without the need for special tools.

#### Flexible trim offerings

Optional materials for stems, gates, seat inserts, and seat elastomers make it easier to trim valves for a wide range of service conditions.

#### Automation

Automation is available for 5,000- and 7,500-psi pressure-rated valves.

#### Exclusive seats design for drop-tight sealing

The Series DM gate valve seats use an unique design to provide a droptight shutoff in abrasive and erosive service.

The valves conform to

- American Bureau of Shipping (ABS)
- Det Norske Veritas (DNV)
- NACE MR0175.

#### Series DM 7500

The seat consists of two identical metal wear rings encapsulated in elastomer to form a cylindrical shape with a gate slot and two round ports. The closed gate bears on the downstream wear ring, and the elastomer provides a drop-tight pressure-responsive seal around the port.

#### Series DM 5000, Class 600, 900, 1500

The cylindrical seat assembly fits into the machined body cavity and is expanded outward toward the valve ports by the bonnet and spread ring in the bottom of the seat. The expansion occurs when the bonnet is tightened onto the body while engaging the seat pin extensions from both wear rings. The spread ring ensures the seat elastomer presses uniformly against the body bore. This design ensures that the seat seals tight against the body and around each valve port. This design has proved to be effective even if the gate and seat ring become scored or abraded during service. When it comes time for maintenance, the seat's single-piece design makes it easy to pull out of the body for replacement.



5-in [130-mm] 7,500-psi WP Series DM gate valve.



Port	Size, in [mm]	Pressure Classes				
		600	900	1500	5000	7500
Full port (FP)	2 [50]	•	•	•	•	
	21⁄2 [65]	•	•	•		
	3 [80]	•	•	•	•	•
	4 [100]	•	•	•	•	•
	5 [125]				•	•
	6 [150]	•	•			
Reduced port	$2 \times 1\frac{1}{2} [50 \times 40]$	•				
(RP)	$2\frac{1}{2} \times 2$ [65 × 50]				•	
	$3 \times 2 [80 \times 50]$	•				
	$4 \times 3 [100 \times 80]$				•	٠
	$5 \times 4 [125 \times 100]$				•	٠
	6 × 4 [150 × 100]				•	
	6×5 [150×125]				•	•
	8 × 6 [200 × 150]	•				

# **Product Specifications**

## Series DM gate valve general technical information

#### Valve size designations and weld end dimensional information

All references to pipe size in this catalog are the nominal size. The actual OD and ID for various nominal sizes and schedules are tabulated below. Weld end bodies are machined at each end to match the pipe OD and ID.

Nominal Size,	OD	ID			
in [mm]		Sch. 40	Sch. 80	Sch. 160	XXH
11⁄2 [40]	1.900	1.610	1.500	_	_
2 [50]	2.375	2.067	1.939	1.687	1.503
21⁄2 [65]	2.875	2.469	2.323	2.125	1.771
3 [80]	3.500	3.068	2.900	2.624	2.300
4 [100]	4.500	4.026	3.826	3.438	3.152
5 [125]	5.563	_	4.813	4.313	4.063
6 [150]	6.625	6.065	5.761	5.187	4.897

#### Quality, inspections, and testing

 The Cameron quality system is based on ISO 9000 and API Spec Q1 requirements and is ISO 9001:2008 certified. Cameron monitors all phases of valve production, from material receipt to final inspection, including liaising with third-party inspectors and certifying authorities.

All gate-style DEMCO valves are hydrostatically tested; stem seal, body, and seat are inspected for zero leakage under pressure before being released for shipment. Hydrotest specifications are based upon the latest-edition API Spec 6A testing requirements; Series DM 7500 Groups 2 and 3 valves undergo additional test cycles, including low-pressure seat tests prior to being released for shipment.

 Group 1—Basic valve. Hydrostatic shell test—11,250 psi for 3 min. Hydrostatic seat test—7,500 psi for 3 min, each side. Material traceability on body and bonnet.

- Group 2—Same as Group 1, except hydrostatic shell test—11,250 psi for 3 min, drop to 0 psi, then 11,250 psi for 15 min. Test is charted. Hydrostatic seat test—7,500 psi for 3 min, drop to 0 psi, 7,500 psi for 15 min, drop to 0 psi, then 300 psi for 5 min, each side. Test is charted. Material traceability on body, bonnet, stem, and bolting. Impact tests at or below—50 degF [-46 degC] on body, bonnet, stem, and bolting. Surface nondestructive examination (NDE) on body, bonnet, and stem.
- Group 3—Same as Group 2, plus volumetric NDE on body and bonnet.

#### Seat seal options

- Buna-N (nitrile) is excellent for petroleum oil and gases, fuel oils, and alcohols from -10 to 200 degF [-23 to 93 degC].
- FKM is highly resistant to mineral acids and hydrocarbons, and is serviceable from -10 to 400 degF [-23 to 204 degC]; not suitable for steam.
- HNBR is formulated for use with synthetic and oil-based drilling mud service from -20 to 250 degF [-29 to 121 degC].

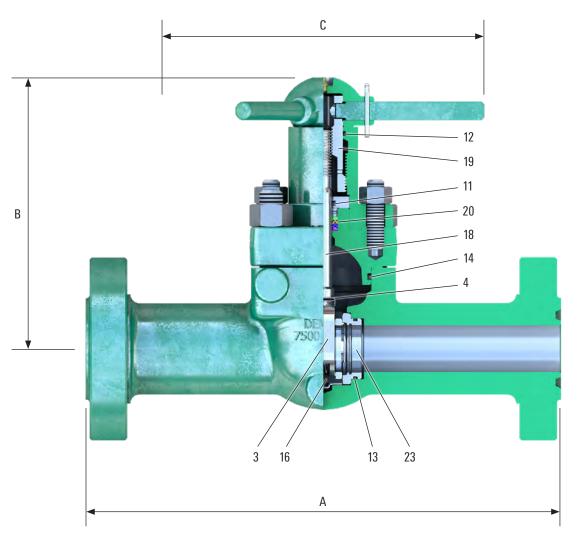
#### **Ordering information**

- Give pipe size, pressure class, and end connection.
- Specify pressure class of flanged ends, raised face (RF), or ring type joint (RTJ).
- For threaded ends, provide type of pipe:
  - nonupset tubing (TBG)
  - long casing thread (LCSG)
  - external upset tubing (UPTBG)
  - short casing thread (CSG).
- For weld ends, give schedule of mating pipe.

# Dimensions, Materials, and Parts List

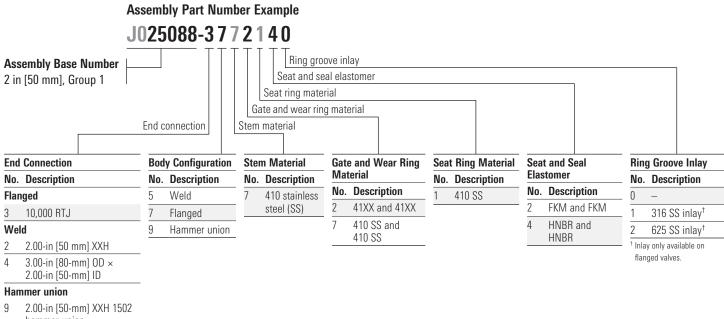
Series DM gate valves — 7,500-psi WP

#### 2-in [50-mm] seat port



Dimensional Data and Weights					
Dimension	Valve Seat Port Size for 7,500-psi WP: 2 in [50 mm]				
A, length, in [mm]	Weld end	9.00 [229]			
	Flanged end, API length	20.50 [521]			
	Hammer union end	15.74 [400]			
For flanged ends	API ring number	BX-152			
	Flange ID, in [mm]	2.00 [50]			
	Flange OD, in [mm]	7.88 [200]			
	Flange bolts, amount; in [mm]	8; ¾ [19]			
Weight, Ibm [kg]	Weld end	83 [38]			
	Flanged end	144 [65]			
	Hammer union end	101 [46]			
Number of handle tur	ns from open to closed	8.6			
B, height, center to to	pp (open), in [mm]	13.04 [331]			
C, handle diameter, ir	ו [mm]	14.00 [356]			





hammer union

Repair	Кеу	Qty.	Description	Valve Seat P	Port Size for 7,500-psi WP: 2	2 in [50 mm]	Repair Kit Component	
Kit	No.			Group 1	Group 2	Group 3	Part Numbers	
			Assembly Base Number – NACE Compliant	J025088	J025103	J025104		
	1	1	Body		ASTM A487 Gr. 4 Class D			
	2	1	Bonnet	4130			-	
•	3	1	Gate	41XX with	quench, polish, quench (QPC	1) nitriding	2171111-01	
					410 SS with QPQ nitriding		2139624-02	
•	4	1	Gate clip		3XX SS		M450480	
	5	1	Handle		ASTM A536 Gr. 65-45-12		-	
	6	4	Heavy hex nut, 1-8 UNC	ASTM A194 Gr. 2H	ASTM A	194 Gr. 7	-	
	7	2	Heavy hex nut, ¾-10 UNC	ASTM A194 Gr. 2H	ASTM A	194 Gr. 7	-	
	8	1	Housing		ASTM A350 Gr. LF2 Class 1		J024982	
	9	1	Lock handle		CD 1213/15		-	
	10	1	Lubricating nipple, 1/8 NPT		Steel			
	11	1	O-ring, AS-568-210, secondary seal	HNBR		2712425-13		
				FKM		J005531-210		
	12	1	O-ring, AS-568-224, housing seal		Buna-N			
•	13	2	O-ring, AS-568-229, wear ring seal	HNBR			2712425-03	
					FKM		J005521-229	
•	14	1	O-ring, AS-568-342, bonnet seal		HNBR		2712425-60	
					FKM		J005521-342	
	15	1	Retainer	CD 1213/15	17-4F	PH SS	-	
•	16	1	Seat assembly	410	SS with QPQ nitriding and HI	NBR	2139742-01	
				410	) SS with QPQ nitriding and F	KM	2139741-02	
	17	1	Split pin, ¾6 in × 1¾ in [5 × 45]		Steel		-	
	18	1	Stem	410 SS		J024983-107		
	19	1	Stem screw	CD 1213/15		J001913		
	20	1	Stem seal assembly with bushing	HNBR and bronze		JN23231-008		
				FKM and bronze		JN23231-006		
	21	4	Stud (double ended), 1-8 UNC × 4.50 (long)	ASTM A193 Gr. B7 ASTM A193 Gr. L7		-		
	22	2	Stud (double ended), ¾-10 UNC × 3.00 (long)	ASTM A193 Gr. B7	ASTM A1	93 Gr. L7	-	
•	23	2	Wear ring		41XX with QPQ nitriding		M452267	
					410 SS		2139647-02	

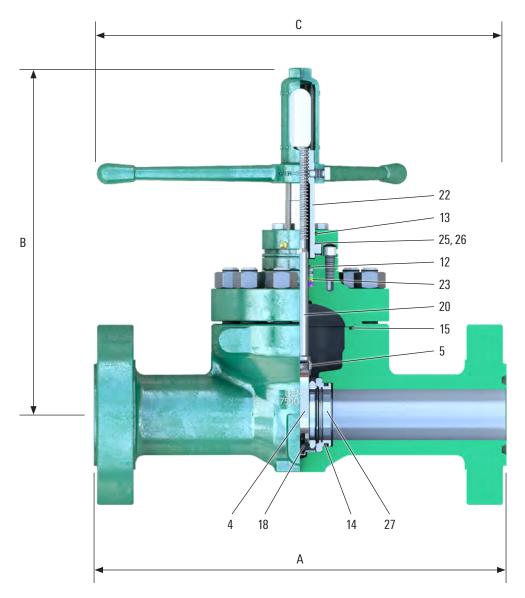
■ Major repair kit J025177-10274—one each for one year of service.

• Minor repair kit J025177-00274.

Major and minor repair kits listed for trim option JOXXXXX-XX72140 (410 SS stem, 41XX with QPQ gate, HNBR seat and seals).

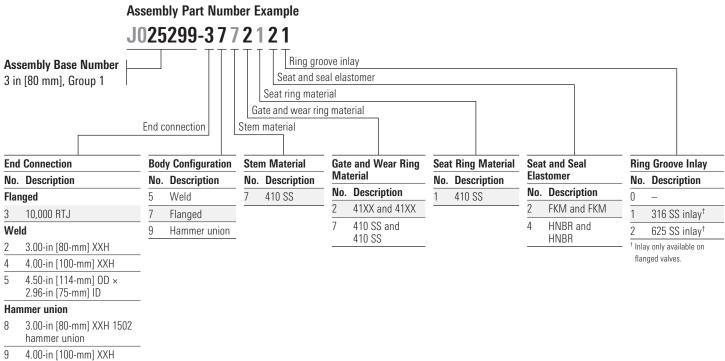
# Series DM gate valves—7,500-psi WP

### 3-in [80-mm] seat port



Dimension	Valve Seat Port Size for 7,500-psi WP: 3 in [80 mm]					
A, length, in [mm]	Weld end		13.00 [330]			
	Flanged end		24.38 [619]			
	Hammer union end	4 in	24.62 [625]			
		3 in	18.88 [480]			
For flanged ends	API ring number		BX-154			
	Flange ID, in [mm]	3.00 [80]				
	Flange OD, in [mm]		10.62 [270]			
	Flange bolts, amount; ir	ו [mm]	8; 1 [25]			
Weight, Ibm [kg]	Weld end		185 [84]			
	Flanged end		299 [136]			
	Hammer union end	4 in	269 [122]			
		3 in	211 [96]			
Number of handle tur	ns from open to closed		16.0			
B, height, center to top (open), in [mm]			20.48 [520]			
C, handle diameter, in	[mm]		24.00 [610]			





0	1100 111 [ 100	
	1502 hamme	er union

Repair	Кеу	Qty.	Description	Valve Seat I	Port Size for 7,500-psi WP: 3	8 in [80 mm]	Repair Kit Componen
Kit	No.			Group 1	Group 2	Group 3	Part Numbers
			Assembly Base Number—NACE Compliant	J025299	J025300	J025301	
	1	1	Body		ASTM A487 Gr. 4 Class D		-
	2	1	Bonnet		4130		_
	3	4	Capscrew socket head, 1/2 UNC × 1.50 (long)	ASTM A574 Alloy Steel	18-8	SS SS	-
•	4	1	Gate		41XX with QPQ nitriding		2171112-01
					410 SS with QPQ nitriding		2139628-02
	5	1	Gate clip		3XX SS		M450505
	6	1	Handle		ASTM A536 Gr. 65-45-12		-
	7	1	Handle screw		CD 1018/26		-
	8	12	Heavy hex nut, 1-8 UNC	ASTM A194 Gr. 2H	ASTM A	194 Gr. 7	-
	9	1	Housing		HR 1018/22		-
	10	4	Hex head bolt, ½-13 UNC × 3.00 (long)		SAE International steel Gr. 5		-
	11	1	Lubricating nipple, 1/4 NPT		Steel		-
	12	1	O-ring, AS-568-214, secondary seal		HNBR		2712425-01
				FKM		J005531-214	
	13	1	O-ring, AS-568-224, housing seal		Buna-N		
•	14	2	O-ring, AS-568-340, wear ring seal	HNBR			2712783-03
				FKM		J005521-340	
•	15	1	O-ring, AS-568-361, bonnet seal		HNBR		2712787-07
					FKM		J005521-361
	16	1	Relief fitting, 1/8 NPT		Steel		-
	17	1	Retainer	HR 1018/22	17-4F		-
•	18	1	Seat assembly		) SS with QPQ nitriding and HI		2139744-01
				41	0 SS with QPQ nitriding and Fl	KM	2139743-02
	19	1	Sight tube		Clear acrylic		-
-	20	1	Stem		410 SS		213597-01
	21	1	Stem cap		ASTM A536 Gr. 65-45-12		-
-	22	1	Stem screw	CD 1018/26		213600-01	
-	23	1	Stem seal assembly with bushing	HNBR and bronze		JN01951-008	
					FKM and bronze		JN01951-006
	24	12	Stud (double ended), 1-8 UNC $\times$ 4.50 (long)	ASTM A193 Gr. B7 ASTM A193 Gr. L7		-	
	25	2	Thrust needle roller bearing	Hardened steel		50315432	
	26	4	Thrust washer		Hardened steel		50315409
•	27	2	Wear ring		41XX with QPQ nitriding		M452571
					410 SS		2139648-02

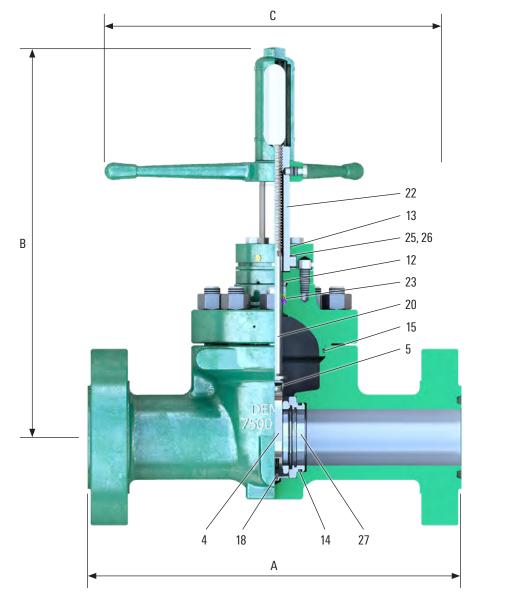
■ Major repair kit J025177-11374—one each for one year of service.

Minor repair kit J025177-00374.

Major and minor repair kits listed for trim option J0XXXXX-XX72140 (410 SS stem, 41XX with QPQ gate, and HNBR seat and seals). Consult Cameron for other repair kit trim options.

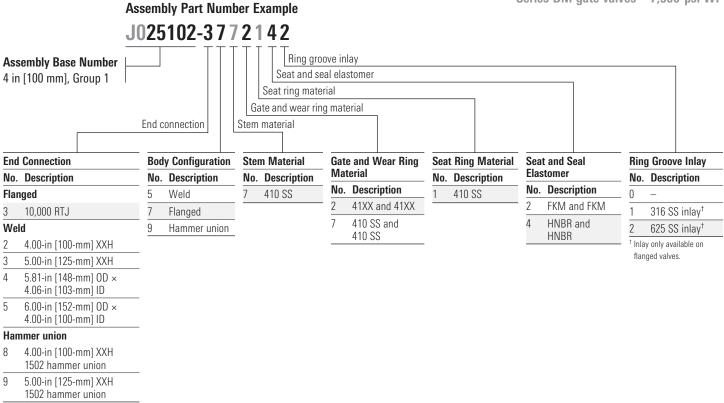
# Series DM gate valves—7,500-psi WP

### 4-in [100-mm] seat port



Dimension	Valve Seat Port Size for	or 7,500-psi	WP: 4 in [100 mm]
A, length, in [mm]	Weld end		16.00 [406]
	Flanged end		26.38 [670]
	Hammer union end	5 in	25.62 [651]
		4 in	27.62 [702]
For flanged ends	API ring number		BX-155
	Flange ID, in [mm]	4.00 [100]	
	Flange OD, in [mm]	12.44 [316]	
	Flange bolts, amount; ir	n [mm]	8; 11⁄8 [29]
Weight, Ibm [kg]	Weld end		281 [127]
	Flanged end		456 [207]
	Hammer union end	5 in	379 [172]
		4 in	365 [166]
Number of handle tur	ns from open to closed		21.3
B, height, center to top (open), in [mm]			27.53 [699]
C, handle diameter, in	[mm]		24.00 [610]





Repair	Key	Qtv.	Description	Valve Seat P	Port Size for 7,500-psi WP: 4	in [100 mm]	Repair Kit Component
Kit	No.	,-		Group 1	Group 2	Group 3	Part Numbers
			Assembly Base Number—NACE Compliant	J025102	J025107	J025108	
	1	1	Body	ASTM A487 Gr. 4 Class D			-
	2	1	Bonnet		4130		-
	3	4	Capscrew socket head, 5% UNC × 1.75 (long)	ASTM A574 Alloy Steel 18-8 SS			-
•	4	1	Gate	41XX with QPQ nitriding			2171267-01
					410 SS with QPQ nitriding		2139637-02
•	5	1	Gate clip		3XX SS		M450505
	6	1	Handle		ASTM A536 Gr. 65-45-12		-
	7	1	Handle screw		CD 1018/26		-
	8	10	Heavy hex nut, 11/8-8 UNC	ASTM A194 Gr. 2H	ASTM A1	94 Gr. 7	-
	9	4	Hex head bolt, %-11 UNC × 3.50 (long)		SAE steel Gr. 5		-
	10	4	Housing		HR 1018/22		-
	11	1	Lubricating nipple, 1/4 NPT	Steel			-
	12	1	O-ring, AS-568-216, secondary seal	HNBR		2726268-01	
				FKM			J005531-216
	13	1	O-ring, AS-568-228, housing seal	Buna-N		J005526-228	
	14	2	O-ring, AS-568-349, wear ring seal	HNBR		2712787-04	
					FKM		J005521-349
•	15	1	O-ring, AS-568-364, bonnet seal		HNBR		2712426-11
					FKM		J005521-364
	16	1	Relief fitting, ¼ NPT		Steel		-
	17	1	Retainer	HR 1018/22	17-4P	H SS	-
•	18	1	Seat assembly	410	SS with QPQ nitriding and HN	IBR	2139746-01
				41	0 SS with QPQ nitriding and FK	M	2139745-02
	19	1	Sight tube		Clear acrylic		-
•	20	1	Stem		410 SS		2140684-01
	21	1	Stem cap	ASTM A536 Gr. 65-45-12			-
•	22	1	Stem screw	CD 1018/26		J019159	
-	23	1	Stem seal assembly with bushing	HNBR and bronze		JN15853-008	
				FKM and bronze		JN15853-006	
	24	10	Stud (double ended), 11/8-8 UNC × 5.50 (long)	ASTM A193 Gr. B7	ASTM A1	93 Gr. L7	-
-	25	2	Thrust needle roller bearing	Hardened steel		J050911-005	
•	26	4	Thrust washer		Hardened steel		J050911-006
•	27	2	Wear ring		41XX with QPQ nitriding		M452290

410 SS

■ Major repair kit J025177-10474—one each for one year of service.

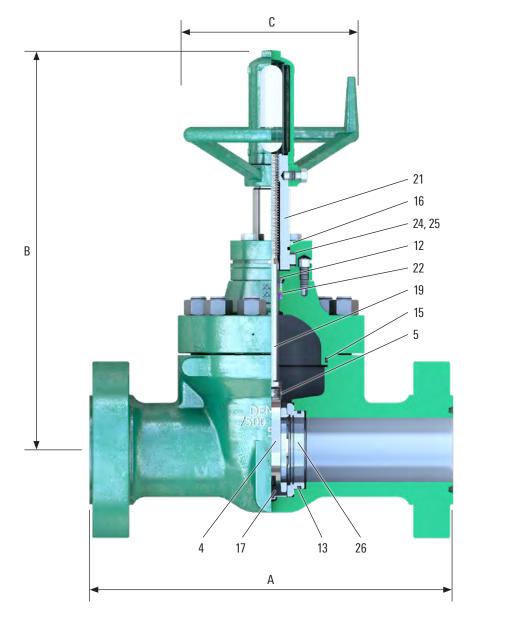
• Minor repair kit J025177-00474.

Major and minor repair kits listed for trim option J0XXXXX-XX72140 (410 SS stem, 41XX with QPQ gate, and HNBR seat and seals).

2139649-02

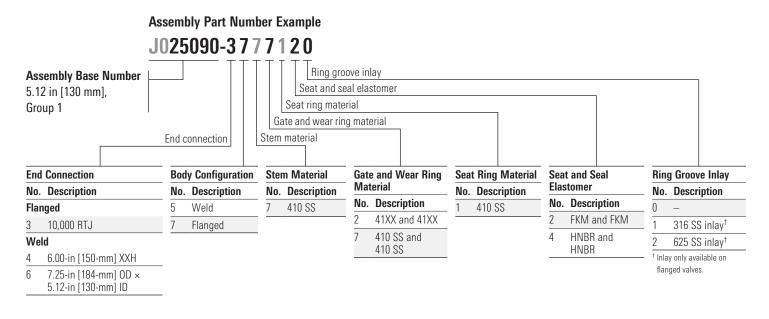
# Series DM gate valves—7,500-psi WP

### 5.12-in [130-mm] seat port



Dimensional Data and Weights					
Dimension	Valve Seat Port Size for 7,500-psi WP: 5.12 in [130 mm]				
A, length, in [mm]	Weld end	17.88 [454]			
	Flanged end	29.00 [737]			
For flanged ends	API ring number	BX-169			
	Flange ID, in [mm]	5.12 [130]			
	Flange OD, in [mm]	14.06 [357]			
	Flange bolts, amount; in [mm]	12; 11⁄8 [29]			
Weight, Ibm [kg]	Weld end	532 [241]			
	Flanged end	772 [350]			
Number of handle tur	ns from open to closed	27.8			
B, height, center to to	p (open), in [mm]	31.87 [809]			
C, handle diameter, in	[mm]	24.00 [610]			





Repair	Key	Qty.	Description	Valve Seat Por	rt Size for 7,500-psi WP: 5.1	12 in [130 mm]	Repair Kit Componen
Kit	No.		, .	Group 1	Group 3	Part Numbers	
			Assembly Base Number—NACE Compliant	J025090	J025109	J025110	
	1	1	Body		ASTM A487 Gr. 4 Class D	,	-
	2	1	Bonnet		4130		-
	3	4	Capscrew socket head, 5/4 UNC × 1.75 (long)	ASTM A574 Alloy Steel	18-8	B SS	-
•	4	1	Gate		41XX with QPQ nitriding		2171108-01
					410 SS with QPQ nitriding		2139629-02
	5	1	Gate clip		3XX SS		M451649
	6	1	Handle		ASTM A536 Gr. 65-45-12		-
	7	1	Handle screw	CD 1018/26			-
	8	12	Heavy hex nut, 1¼-8 UN	ASTM A194 Gr. 2H	ASTM A	194 Gr. 7	-
	9	4	Hex head bolt, ¾-10 UNC × 4.00 (long)		SAE steel Gr. 5		-
	10	1	Housing		HR 1018/22		-
	11	1	Lubricating nipple, ¼ NPT		Steel		-
	12	1	O-ring, AS-568-218, secondary seal		HNBR		2712425-12
					FKM		J005531-218
	13	2	O-ring, AS-568-435, wear ring seal		HNBR		2726268-02
					FKM		J005521-435
•	14	1	O-ring, AS-568-446, bonnet seal		HNBR		2712425-78
		-			J005521-446		
	15	1	Retainer	HR 1018/22	17-4	PH SS	-
	16	1	Rod wiper, housing seal		Urethane		2726191-02-95
•	17	1	Seat assembly	410	SS with QPQ nitriding and HI	NBR	2139748-01
				410	) SS with QPQ nitriding and F	KM	2269500-01
	18	1	Sight tube		Clear acrylic		-
	19	1	Stem		410 SS		J024943-107
	20	1	Stem cap		ASTM A536 Gr. 65-45-12		-
-	21	1	Stem screw		CD 1018/26		J023415
	22	1	Stem seal assembly with bushing		HNBR and bronze		JN16995-008
					FKM and bronze		JN16995-006
	23	12	Stud (double ended), $1\frac{1}{4}$ -8 UN × 6.25 (long)	ASTM A193 Gr. B7	ASTM A1	193 Gr. L7	-
	24	2	Thrust needle roller bearing		Hardened steel		J050911-009
	25	4	Thrust washer		Hardened steel		J050911-010
•	26	2	Wear ring	41XX with QPQ nitriding		M452619	
					410 SS		2139650-02

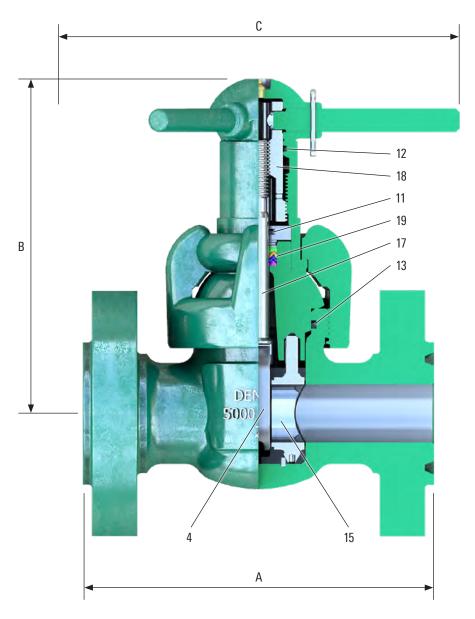
■ Major repair kit J025177-10574—one each for one year of service.

• Minor repair kit J025177-00574.

Major and minor repair kits listed for trim option J0XXXXX-XX72140 (410 SS stem, 41XX with QPQ gate, and HNBR seat and seals).

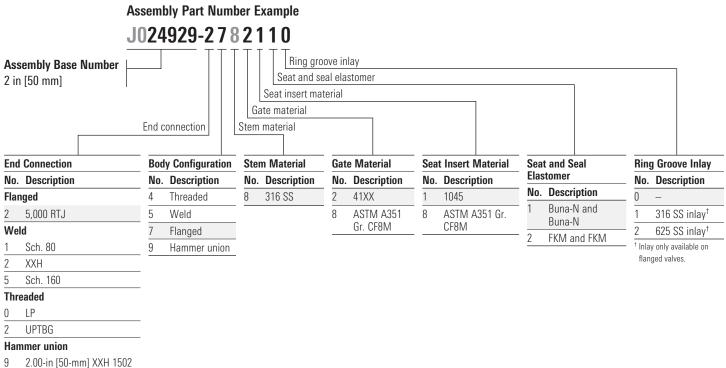
# Series DM gate valves—5,000-psi WP

### 2-in [50-mm] seat port



Dimensional Data and Weights							
Dimension	Valve Seat Port Size for 5,000-psi	i WP: 2 in [50 mm]					
A, length, in [mm]	Weld and threaded end	9.00 [229]					
	Flanged end	12.12 [308]					
	Hammer union end	15.74 [400]					
For flanged ends	API ring number	R-24					
	Flange ID, in [mm]	2.00 [50]					
	Flange OD, in [mm]	8.50 [216]					
	Flange bolts, amount; in [mm]	8; 1/8 [22]					
Weight, Ibm [kg]	Weld and threaded end	58 [26]					
	Flanged end	103 [47]					
	Hammer union end	77 [35]					
Number of handle tur	10.2						
B, height, center to to	p (open), in [mm]	13.00 [330]					
C, handle diameter, in [mm] 14.00 [356]							





hammer union

lepair	Key	Qty.	Description Valve Seat Port Size for 5,000-psi WP: 2 in [50 mm]					
lit	No.		Assembly Base Number—NACE Compliant	•	Part Numbers			
			<b>2-in [50-mm]</b> nominal end—threaded, flanged, weld, and hammer	J024929				
			2.50-in [65-mm] nominal end—weld	J025205	_			
	1	1	Body	ASTM A105 for Threaded, weld, and hammer	-			
				ASTM A487 Gr. 4 Class A for Flanged	_			
	2	1	Bonnet	ASTM A105	_			
	3	1	Coupling	ASTM A487 Gr. 4 Class A	_			
	4	1	Gate	41XX with electroless nickel plating (ENP)	J001887-002			
				ASTM A351 Gr. CF8M	J001887-108			
	5	1	Handle	ASTM A536 Gr. 65-45-12	_			
	6	1	Housing	CD 1018	-			
	7	1	Index pin	Steel	-			
	8	1	Lock handle	CD 1213/15	-			
	9	1	Lock screw	Steel	-			
	10	1	Lubricating nipple, 1/2 NPT	Steel	_			
	11	1	0-ring, AS-568-210, secondary seal	Buna-N	J005526-210			
	12	1	O-ring, AS-568-224, housing seal	Buna-N	J005526-224			
0	13	1	O-ring, AS-568-342, bonnet seal	Buna-N	J005526-342			
				FKM	J005531-342			
	14	1	Retainer	CD 1213/15	-			
	15	1	Seat assembly	1045 and Buna-N	J001876-011			
				1045 and FKM	J001876-012			
				ASTM A351 Gr. CF8M and Buna-N	J001876-081			
				ASTM A351 Gr. CF8M and FKM	J001876-082			
	16	1	Split pin, ¾16 × 1¾	Steel	-			
	17	1	Stem	316 SS	J001931-008			
	18	1	Stem screw	CD 1213/15	J001913			
	19	1	Stem seal assembly with bushing	Buna-N and bronze	JN01949-001			
			· -	FKM and bronze	JN01949-006			

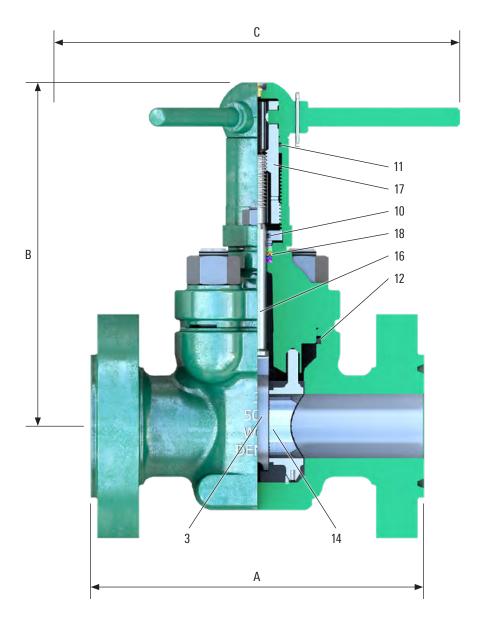
■ Major repair kit J025216-11221—one each for one year of service.

• Minor repair kit J025216-01221.

Major and minor repair kits listed for trim option J0XXXXX-XX82110 (316 SS stem, 41XX with ENP gate, and 1045 Buna-N seat and seals).

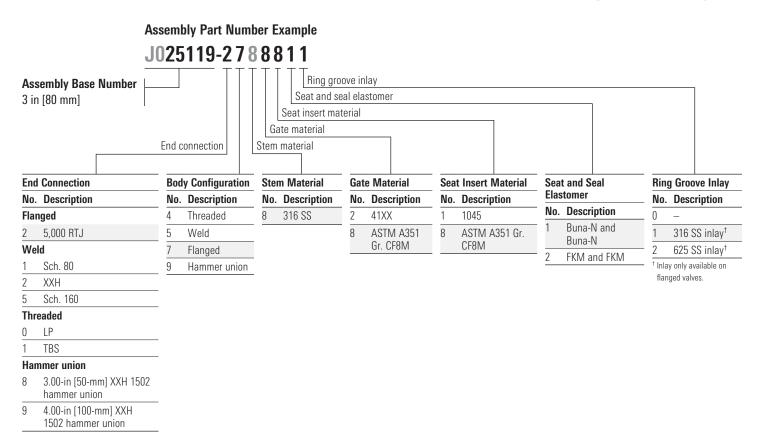
# Series DM gate valves—5,000-psi WP

### 3-in [80-mm] seat port



Valve Seat Port Size for 5,000-psi WP: 3 in [80 mm]					
Weld and threaded end		11.00 [279]			
Flanged end		15.63 [397]			
Hammer union end	4 in	16.88 [429]			
	3 in	22.62 [574]			
API ring number		R-35			
Flange ID, in [mm]	3.00 [80]				
Flange OD, in [mm]	10.50 [267]				
Flange bolts, amount; ir	n [mm]	8; 11⁄8 [29]			
Weld and threaded end		158 [72]			
Flanged end	239 [109]				
Hammer union end	4 in	178 [81]			
	3 in	185 [84]			
ns from open to closed		11.0			
B, height, center to top (open), in [mm]					
C, handle diameter, in [mm]					
	Flanged end Hammer union end API ring number Flange ID, in [mm] Flange OD, in [mm] Flange bolts, amount; ir Weld and threaded end Flanged end Hammer union end ns from open to closed p (open), in [mm]	Hammer union end       4 in 3 in         API ring number         Flange ID, in [mm]         Flange OD, in [mm]         Flange bolts, amount; in [mm]         Weld and threaded end         Flanged end         Hammer union end       4 in 3 in         as from open to closed         p (open), in [mm]			





Repair	Key	Qty.	Description	Valve Seat Port Size for 5,000-psi WP: 3 in [80 mm]	Repair Kit Component
Git	No.		Assembly Base Number—NACE Compliant	Part Numbers	
			<b>3-in [80-mm]</b> nominal end—threaded, flanged, weld, and hammer	J025119	
			4-in [100-mm] nominal end—weld	J025116	
	1	1	Body	ASTM A487 Gr. 4 Class D	-
	2	1	Bonnet	ASTM A487 Gr. 4 Class D	-
•	3	1	Gate	41XX with ENP	J001886-002
				ASTM A351 Gr. CF8M	J001886-108
	4	1	Handle	ASTM A536 Gr. 65-45-12	-
	5	4	Heavy hex nut, 1%-8 UN	ASTM A194 Gr. 2H	-
	6	2	Heavy hex nut, ¾-10 UNC	ASTM A194 Gr. 2H	-
	7	1	Housing	ASTM A350 Gr. LF2 Class 1	-
	8	1	Lock handle	CD 1213/15	-
	9	1	Lubricating nipple, 1/8 NPT	Steel	-
	10	1	0-ring, AS-568-212, secondary seal	Buna-N	J005526-212
	11	1	O-ring, AS-568-226, housing seal	Buna-N	J005526-226
•	12	1	0-ring, AS-568-433, bonnet seal	Buna-N	J005526-433
				FKM	J005531-433
	13	1	Retainer	CD 1213/15	-
•	14	1	Seat assembly	1045 and Buna-N	J001878-011
				1045 and FKM	J001878-012
				ASTM A351 Gr. CF8M and Buna-N	J001878-081
				ASTM A351 Gr. CF8M and FKM	J001878-082
	15	1	Split pin, ¾6 × 1¾	Steel	-
	16	1	Stem	316 SS	J001932-008
	17	1	Stem screw	CD 1213/15	J001914-003
	18	1	Stem seal assembly with bushing	Buna-N and bronze	JN01950-001
				FKM and bronze	JN01950-006
	19	2	Stud (continuous), ¾-10 UNC × 2.88 (long)	ASTM A193 Gr. B7	-
	20	4	Stud (double ended), 1%-8 UN × 5.25 (long)	ASTM A193 Gr. B7	_

Major repair kit J025216-12221 — one each for one year of service.

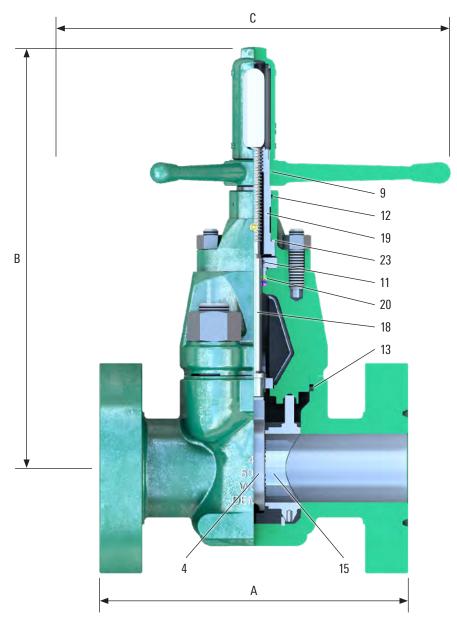
• Minor repair kit J025216-02221.

Major and minor repair kits listed for trim option J0XXXXX-XX82110 (316 SS stem, 41XX with ENP gate, and 1045 Buna-N seat and seals).

 $\label{eq:consult} \mbox{Consult Cameron for other repair kit trim options}.$ 

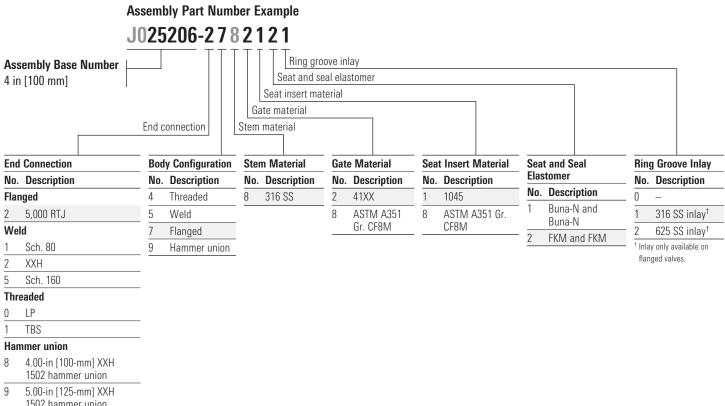
# Series DM gate valves—5,000-psi WP

### 4-in [100-mm] seat port



Dimensional Data an Dimension	Valve Seat Port Size fo	or 5,000-psi	WP: 4 in [100 mm]
A, length, in [mm]	Weld and threaded end		13.00 [330]
-	Flanged end		18.00 [457]
	Hammer union end	5 in	22.62 [574]
		4 in	24.62 [625]
or flanged ends	API ring number		R-39
	Flange ID, in [mm]	4.00 [100]	
	Flange OD, in [mm]	12.25 [311]	
	Flange bolts, amount; ir	ו [mm]	8; 11⁄4 [32]
Neight, lbm [kg]	Weld and threaded end		236 [107]
	Flanged end		373 [169]
	Hammer union end	5 in	332 [151]
		4 in	328 [149]
Number of handle tur	22.9		
3, height, center to to	24.57 [624]		
C, handle diameter, in	[mm]		23.00 [584]





1502	hammer	union	

Parts Li Repair	Key	Qty.	Description	Valve Seat Port Size for 5,000-psi WP: 4 in [100 mm]	Repair Kit Component
Kit	No.	uty.	Assembly Base Number—NACE Compliant		Part Numbers
			4-in [100-mm] nominal end—threaded, flanged, weld, and hammer	J025206	-
					_
			5-in [125-mm] nominal end—weld and hammer	J025118	_
			6-in [150-mm] nominal end—weld	J025220	
	1	1	Body	ASTM A487 Gr. 4 Class D	-
	2	1	Bonnet	ASTM A487 Gr. 4 Class D	-
	3	1	Downstop ring	303 SS	-
•	4	1	Gate	41XX with ENP	J001926-002
				ASTM A351 Gr. CF8M	J001926-108
	5	1	Handle	ASTM A536 Gr. 65-45-12	-
	6	4	Heavy hex nut, 1¾ special	ASTM A194 Gr. 2H	-
	7	2	Heavy hex nut, ½-9 UNC	ASTM A194 Gr. 2H	-
	8	1	Housing	HR 1018	-
	9	1	Кеу	Steel	J005305-10016
	10	1	Lubricating nipple, ¼ NPT	Steel	-
	11	1	O-ring, AS-568-214, secondary seal	Buna-N	J005526-214
	12	1	0-ring, AS-568-226, housing seal	Buna-N	J005526-226
•	13	1	0-ring, AS-568-439, bonnet seal	Buna-N	J005520-439
				FKM	J005531-439
	14	1	Retainer	CD 1213/15	-
•	15	1	Seat assembly	1045 and Buna-N	J002207-021
				1045 and FKM	J002207-022
				ASTM A351 Gr. CF8M and Buna-N	J002207-081
				ASTM A351 Gr. CF8M and FKM	J002207-082
	16	1	Sight tube	Clear acrylic	-
	17	1	Stem cap	ASTM A536 Gr. 65-45-12	-
	18	1	Stem	316 SS	J007439-008
	19	1	Stem screw	CD 1213/15	J007416
	20	1	Stem seal assembly with bushing	Buna-N and bronze	JN01951-001
				FKM and bronze	JN01951-006
	21	2	Stud (continuous), %-9 UN × 3.50 (long)	ASTM A193 Gr. B7	-
	22	4	Stud (double ended), 1¾ special × 6.00 (long)	ASTM A193 Gr. B7	-
	23	2	Thrust washer	Teflon and phenolic material	J007426

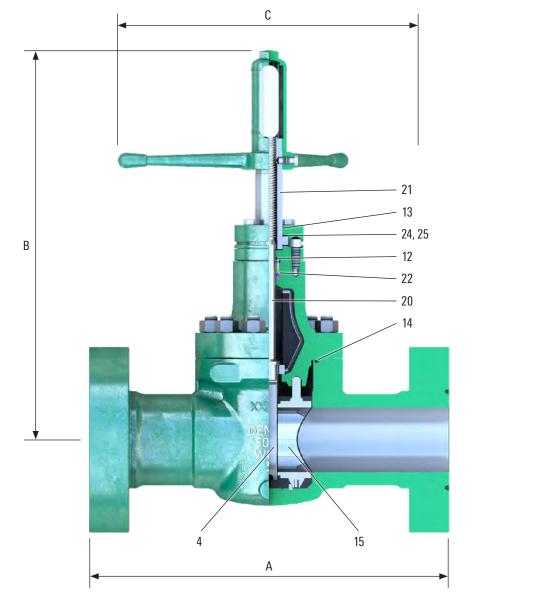
Major repair kit J025216-14221—one each for one year of service.

Minor repair kit J025216-04221.

Major and minor repair kits listed for trim option J0XXXXX-XX82110 (316 SS stem, 41XX with ENP gate, and 1045 Buna-N seat and seals). Consult Cameron for other repair kit trim options.

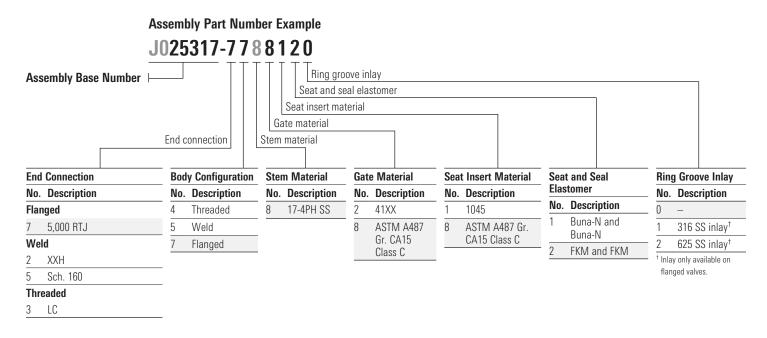
# Series DM gate valves—5,000-psi WP

### 5.12-in [130-mm] seat port



Dimensional Data and Weights						
Dimension Valve Seat Port Size for 5,000-psi WP: 5.12 in [13						
A, length, in [mm]	Weld and threaded end	16.00 [406]				
	Flanged end	28.62 [727]				
For flanged ends	API ring number	R-44				
	Flange ID, in [mm]	5.12 [130]				
	Flange OD, in [mm]	14.75 [375]				
	Flange bolts, amount; in [mm]	8; 1½ [38]				
Weight, Ibm [kg]	Weld end	329 [149]				
	Flanged end	611 [277]				
Number of handle tur	ns from open to closed	29.6				
B, height, center to top (open), in [mm] 30.93 [786]						
C, handle diameter, in [mm] 24.00 [610]						





Parts Li lepair	Key	Qty.	Description	Valve Seat Port Size for 5,000-psi WP: 5.12 in [130 mm]	Repair Kit Componen		
lit	No.	ary.	Assembly Base Number – NACE Compliant				
			5-in [125-mm] nominal end—threaded and flanged	J025317	_		
			6-in [150-mm] nominal end—weld	J025326	-		
	1	1	Body	ASTM A487 Gr. 4 Class D	-		
	2	1	Bonnet	ASTM A487 Gr. 4 Class D	-		
	3	1	Downstop ring	303 SS	-		
	4	4	Capscrew socket head, 5% UNC × 1.75 (long)	ASTM A574 Alloy Steel	_		
	5	1	Gate	41XX with ENP	J021952-002		
				ASTM A487 Gr. CA15 Class C	J021952-108		
	6	1	Handle	ASTM A536 Gr. 65-45-12	_		
	7	1	Handle screw	CD 1018/26	-		
	8	12	Heavy hex nut, 1-8 UNC	ASTM A194 Gr. 2H	-		
	9	4	Hex head bolt, %-11 UNC × 3.50 (long)	SAE steel Gr. 2	-		
	10	1	Housing	HR 1018/22	-		
	11	1	Lubricating nipple, 1/4 NPT	Steel	-		
	12	1	O-ring, AS-568-216, secondary seal	Buna-N	J005526-216		
	13	1	O-ring, AS-568-228, housing seal	Buna-N	J005526-228		
•	14	1	O-ring, AS-568-367, bonnet seal	Buna-N	J005520-367		
			-	FKM	J005531-367		
	15	1	Relief fitting, 1/2 NPT	Steel	-		
	16	1	Retainer	HR 1018/22	-		
•	17	1	Seat assembly	1045 and Buna-N	J021948-019		
				1045 and FKM	J021948-012		
				ASTM A487 Gr. CA15 Class C and Buna-N	J021948-099		
				ASTM A487 Gr. CA15 Class C and FKM	J021948-092		
	18	1	Sight tube	Clear acrylic	-		
	19	1	Stem cap	ASTM A536 Gr. 65-45-12	-		
	20	1	Stem	17-4PH SS	J021943-009		
	21	1	Stem screw	CD 1018/26	J019159		
	22	1	Stem seal assembly with bushing	Buna-N and bronze	J015853-001		
				FKM and bronze	J015853-006		
	23	12	Stud (double ended), 1-8 UNC × 4.50 (long)	ASTM A193 Gr. B7	-		
	24	2	Thrust needle roller bearing	Hardened steel	J050911-005		
	25	4	Thrust washer	Hardened steel	J050911-006		

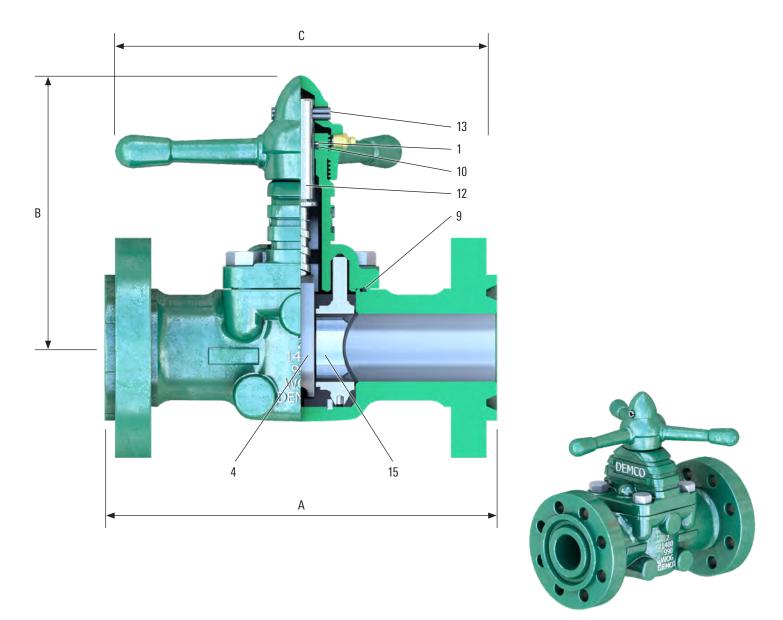
Major repair kit J025216-15221 — one each for one year of service.

Minor repair kit J025216-05221.

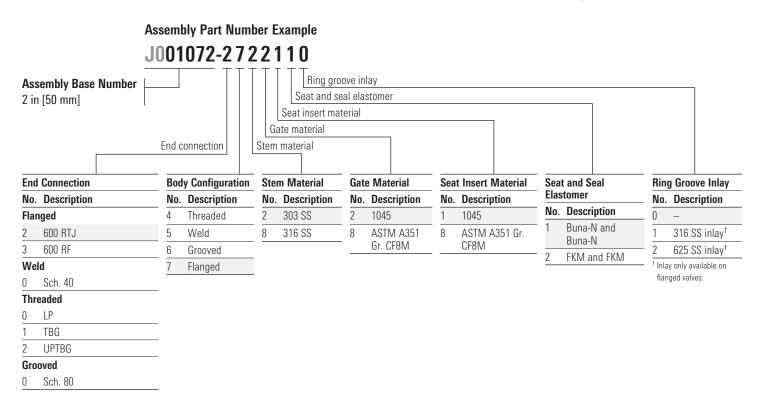
Major and minor repair kits listed for trim option J0XXXXX-XX82110 (17-4PH SS stem, 41XX with ENP gate, and 1045 Buna-N seat and seals).

## Series DM gate valves—ASME Class 600

1.62- to 6-in [40- to 150-mm] seat port



Dimension		Valve Seat Port Sizes for ASME 600 Class, in [mm]						
		1.62 [40] with 1.50 [40] Threaded Ends	2 [50]	2.50 [65]	3 [80]	4 [100]	6 [150]	6 [150] with 8 [200] Flanges
A, length, in [mm]	Weld, threaded, and grooved end	7.75 [197]	8.88 [226]	10.00 [254]	10.25 [260]	11.88 [302]	15.50 [394]	_
	Flanged RF end	_	11.50 [292]	13.00 [330]	14.00 [356]	17.00 [432]	22.00 [559]	26.00 [660]
	Flanged RTJ end	_	11.62 [295]	13.12 [333]	14.12 [359]	17.12 [435]	22.12 [562]	26.12 [663]
For flanged ends	API ring number	_	R-23	R-26	R-31	R-37	R-45	R-49
	Flange ID, in [mm]	_	2.00 [50]	2.50 [65]	3.00 [80]	4.00 [100]	6.00 [150]	8.00 [200]
	Flange OD, in [mm]	_	6.50 [165]	7.50 [191]	8.25 [210]	10.75 [273]	14.00 [356]	16.50 [419]
	Flange bolts, amount; in [mm]	_	8; 5⁄8 [16]	8; ¾ [19]	8; ¾ [19]	8; 1/8 [22]	12; 1 [25]	12; 11⁄8 [29]
Weight, Ibm [kg]	Weld, threaded, and grooved end	20 [9]	26 [12]	50 [23]	60 [27]	98 [44]	310 [141]	_
	Flanged end	_	44 [20]	74 [34]	96 [44]	176 [80]	428 [194]	590 [268]
B, height, center to top (open), in [mm]		7.75 [197]	8.75 [222]	10.62 [270]	11.38 [289]	13.88 [353]	19.25 [489]	19.25 [489]
C, handle diameter, in [mm]		9.50 [241]	11.00 [279]	12.62 [321]	12.62 [321]	14.25 [362]	24.00 [610]	24.00 [610]

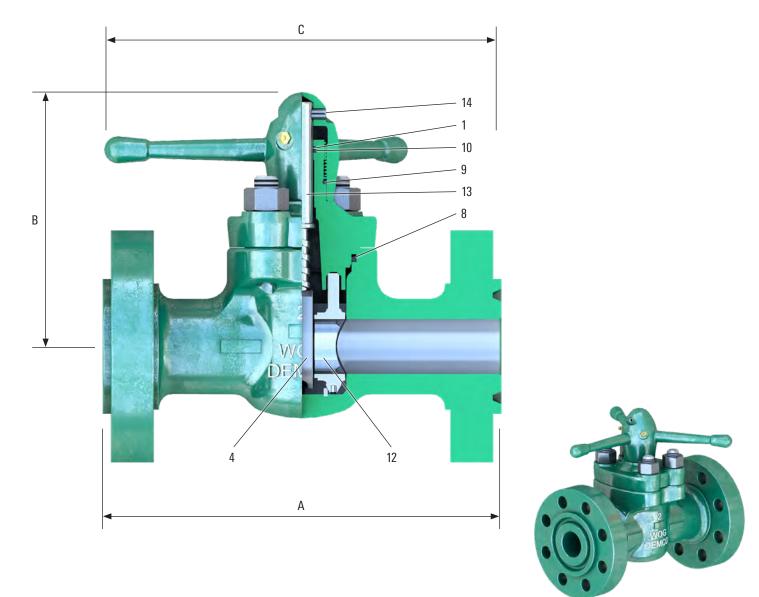


Parts	List										
Key	Qty.	Description			Valve Seat Port	Sizes for ASME 600 (	Class, in [mm]				
No.			1.62 [40] with 1.50 [40] Threaded Ends	2 [50]	2.50 [65]	3 [80]	4 [100]	6 [150]	6 [150] with 8 [200] Flanges		
		Assembly base number									
		Threaded	J003938	J001072	J001074	J001076	J001078	J001080	-		
		Weld	-	J001092	J001094	J001096	J001098	J001100	-		
		Grooved	-	J001082	J001084	J001086	J001088	J001090	-		
		Flanged	-	J001062	J001064	J001066	J001068	J001070	J003945		
1†	1	Backup ring			J	Chrome leather	1	1			
2	1	Body			A	ASTM A216 Gr. WCB					
3	1	Bonnet			A	ASTM A216 Gr. WCB					
4†	1	Gate	1045 with ENP								
				ASTM A351 CF8M							
5	1	Handle			AS	TM A536 Gr. 65-45-12					
6	4	Heavy hex nut, body					ASTM A194 Gr. 2H				
7	4	Hex head bolt, body	SAE Gr. 5				Na				
8	1	Lubricating nipple, 1/8 NPT				Steel					
9†	1	O-ring, bonnet seal			Buna-N						
						FKM					
10†	1	O-ring, stem seal				Buna-N					
						FKM					
11†	1	Seat assembly				1045 and Buna-N					
				1045 and FKM							
			ASTM A351 Gr. CF8M and Buna-N								
1.04			ASTM A351 Gr. CF8M and FKM								
12†	1	Stem				303 SS 316 SS					
13 <sup>†</sup>	1	Stem pin				Spring steel					
13'	4				[	opring steel	ACTM A 102 C+ D7				
14	4	Stud (double ended), body	-	– ASTM A193 Gr. B7							

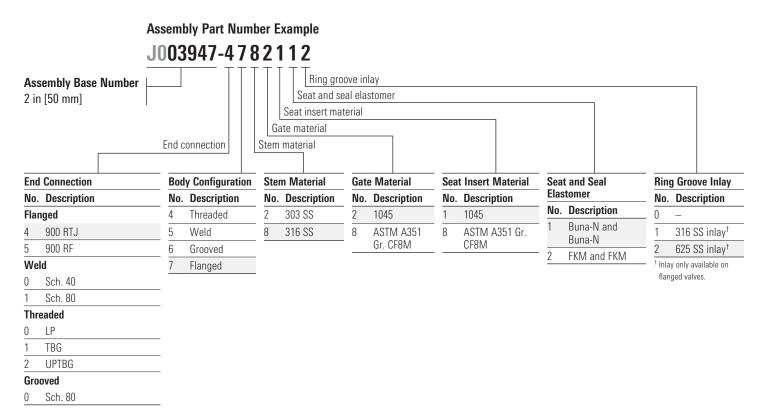
<sup>†</sup> Recommended spare parts. Contact Cameron for specific part numbers.

## Series DM gate valves—ASME Class 900

2- to 6-in [50- to 150-mm] seat port



Dimension	Valve Seat Port Sizes for ASME 900 Class, in [mm]					
		2 [50]	2.50 [65]	3 [80]	4 [100]	6 [150]
A, length, in [mm]	Weld, threaded, and grooved end	9.00 [229]	9.75 [248]	11.00 [279]	13.00 [330]	20.00 [508]
	Flanged RF end	14.50 [368]	16.50 [419]	15.00 [381]	18.00 [457]	24.00 [610]
	Flanged RTJ end	14.62 [371]	16.62 [422]	15.12 [384]	18.12 [460]	24.12 [613]
For flanged ends	API ring number	R-24	R-27	R-31	R-37	R-45
	Flange ID, in [mm]	2.00 [50]	2.50 [65]	3.00 [80]	4.00 [100]	6.00 [150]
	Flange OD, in [mm]	8.50 [216]	9.62 [244]	9.50 [241]	11.50 [292]	15.00 [381]
	Flange bolts, amount; in [mm]	8; 1/8 [22]	8; 1 [25]	8; 1/8 [22]	8; 11⁄8 [19]	12; 11/8 [19]
Weight, Ibm [kg]	Weld, threaded, and grooved end	48 [22]	87 [39]	95 [43]	140 [64]	325 [147]
	Flanged end	100 [45]	170 [77]	160 [73]	230 [104]	540 [245]
B, height, center to top (open), in [mm]		9.88 [251]	22.88 [581]	12.75 [324]	15.00 [381]	19.25 [489]
C, handle diameter, in [mm]		14.50 [368]	19.00 [483]	19.00 [483]	23.00 [584]	24.00 [610]

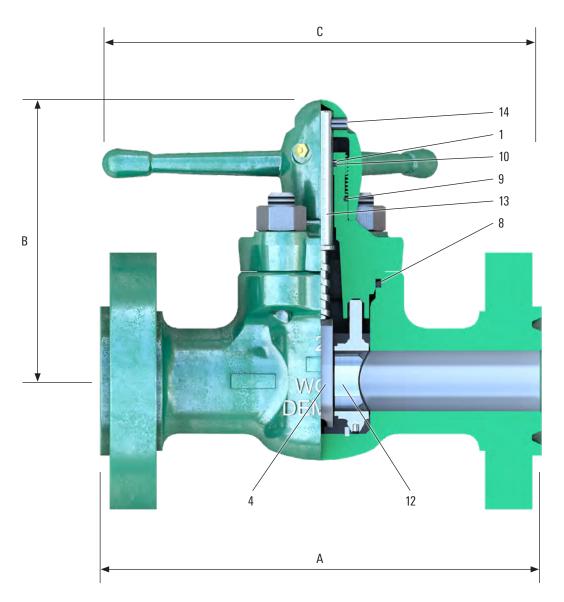


Parts	: List							
Key	Qty.	Description	Valve Seat Port Sizes for ASME 900 Class, in [mm]					
No.			2 [50] 2.50 [65]		3 [80]	4 [100]	6 [150]	
		Assembly Base Number—General Service	J003947	J003951	J003953	J003955	J003999	
1 <sup>†</sup>	1	Backup ring			Chrome leather		·	
2	1	Body		Δ	STM A487 Gr. 4 Class	A		
3	1	Bonnet		Δ	STM A487 Gr. 4 Class	A		
$4^{\dagger}$	1	Gate			1045 with ENP			
					ASTM A351 CF8M			
5	1	Handle		A	ASTM A536 Gr. 65-45-	2		
6	4	Heavy hex nut, body			ASTM A194 Gr. 2H			
7	1	Lubricating nipple, 1/8 NPT	Steel					
8†	1	O-ring, bonnet seal	Buna-N					
					FKM			
9†	1	O-ring, screw seal			Buna-N			
10†	1	O-ring, stem seal			Buna-N			
					FKM			
11	1	Relief fitting, 1/8 NPT			Steel			
12†	1	Seat assembly			1045 and Buna-N			
					1045 and FKM			
				ASTM	A351 Gr. CF8M and E	Buna-N		
			ASTM A351 Gr. CF8M and FKM					
13 <sup>†</sup>	1	Stem	303 SS					
			316 SS					
14†	1	Stem pin			Spring steel			
15	4	Stud (double ended), body			ASTM A193 Gr. B7			

<sup>†</sup> Recommended spare parts. Contact Cameron for specific part numbers.

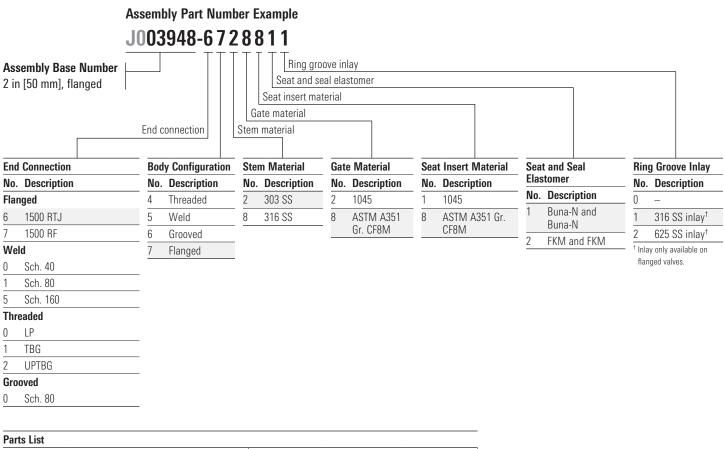
## Series DM gate valves—ASME Class 1500

2- to 3-in [50- to 80-mm] seat port



Dimensional Data and Weights						
Dimension		Valve Seat Port Sizes for ASME 1500 Class, in [m				
		2 [50]	2.50 [65]	3 [80]		
A, length, in [mm]	Weld, threaded, and grooved end	9.00 [229]	9.75 [248]	11.00 [279]		
	Flanged RF end	14.50 [368]	16.50 [419]	18.50 [470]		
	Flanged RTJ end	14.62 [371]	16.62 [422]	18.62 [473]		
For flanged ends	API ring number	R-24	R-27	R-35		
	Flange ID, in [mm]	2.00 [50]	2.50 [65]	3.00 [80]		
	Flange OD, in [mm]	8.50 [216]	9.62 [244]	10.50 [267]		
	Flange bolts, amount; in [mm]	8; 1/8 [22]	8; 1 [25]	8; 11⁄8 [29]		
Weight, Ibm [kg]	Weld, threaded, and grooved end	48 [22]	87 [39]	113 [51]		
	Flanged end	100 [45]	170 [77]	205 [93]		
B, height, center to top (open), in [mm]		9.88 [25]	22.88 [581]	12.75 [324]		
C, handle diameter, in [mm]		14.50 [368]	19.00 [483]	19.00 [483]		



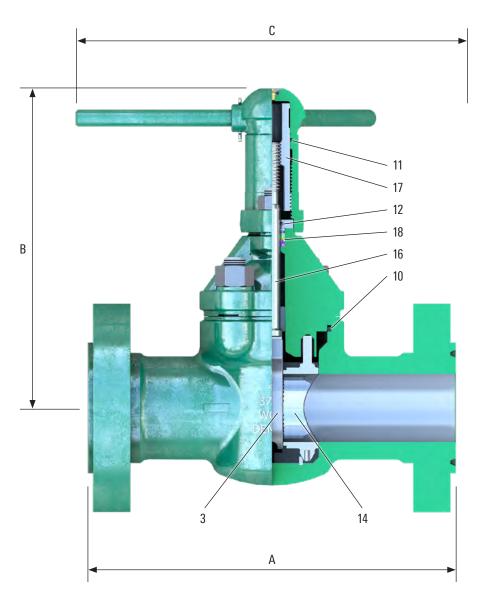


Key	Qty.	Description	Valve Seat Port Sizes for ASME 1500 Class, in [mm]				
No.			2 [50]	2.50 [65]	3 [80]		
		Assembly Base Number—General Service	J003948	J003952	J003957		
1†	1	Backup ring		Chrome leather			
2	1	Body	ļ.	ASTM A487 Gr. 4 Class A			
3	1	Bonnet	ļ A	ASTM A487 Gr. 4 Class A			
4 <sup>†</sup>	1	Gate		1045 with ENP			
				ASTM A351 CF8M			
5	1	Handle	1	ASTM A536 Gr. 65-45-12			
6	4	Heavy hex nut, body		ASTM A194 Gr. 2H			
7	1	Lubricating nipple, ¼ NPT	Steel				
8†	1	O-ring, bonnet seal	Buna-N				
				FKM			
9†	1	O-ring, screw seal		Buna-N			
10 <sup>†</sup>	1	O-ring, stem seal		Buna-N			
				FKM			
11	1	Relief fitting, 1/2 NPT		Steel			
12 <sup>†</sup>	1	Seat assembly		1045 and Buna-N			
				1045 and FKM			
			ASTN	1 A351 Gr. CF8M and Bu	na-N		
			ASTM A351 Gr. CF8M and FKM				
13†	1	Stem	303 SS				
				316 SS			
14†	1	Stem pin		Spring steel			
15	4	Stud (double ended), body		ASTM A193 Gr. B7			

<sup>†</sup> Recommended spare parts. Contact Cameron for specific part numbers.

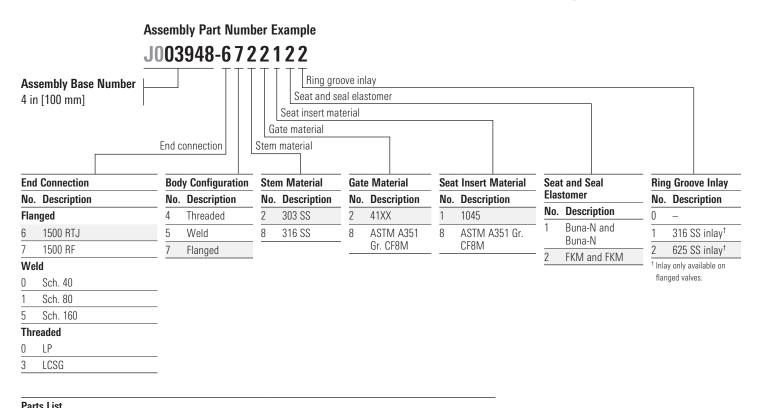
# Series DM gate valves—ASME Class 1500

### 4-in [100-mm] seat port



Dimensional Data and Weights					
Dimension	Valve Seat Port Size for ASME 1500	Class: 4 in [100 mm]			
A, length, in [mm]	Weld, and threaded end	13.00 [330]			
	Flanged RF end	21.50 [546]			
	Flanged RTJ end	21.62 [549]			
For flanged ends	API ring number	R-39			
	- Flange ID, in [mm]	4.00 [100]			
	Flange OD, in [mm]	12.25 [311]			
	- Flange bolts, amount; in [mm]	8; 1¼ [32]			
Weight, Ibm [kg]	Weld, and threaded end	162 [73]			
	Flanged end	320 [145]			
B, height, center to to	21.25 [540]				
C, handle diameter, in [mm] 23.00 [854]					



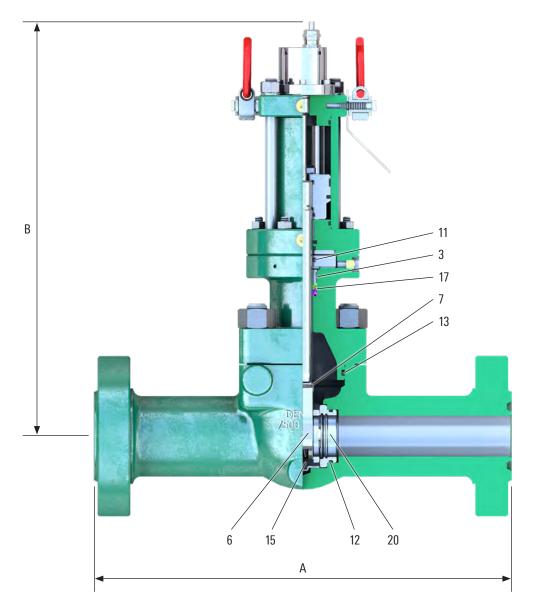


Key	Qty.	Description	Valve Seat Port Size for ASME 1500 Class: 4 in [100 mm]
No.		Assembly Base Number—General Service	J003010
	1	Body	ASTM A487 Gr. 4 Class A
)	1	Bonnet	ASTM A487 Gr. 4 Class A
}†	1	Gate	41XX with ENP
			ASTM A351 Gr. CF8M
ļ	1	Handle	ASTM A536 Gr. 65-45-12
i	4	Heavy hex nut, body	ASTM A194 Gr. 2H
6	2	Heavy hex nut, bonnet	ASTM A194 Gr. 2H
7	1	Housing	CD 1029
}	1	Lock handle	CD 1213/15
)	1	Lubricating nipple, 1/8 NPT	Steel
0†	1	O-ring, bonnet seal	Buna-N
			FKM
11†	1	O-ring, housing seal	Buna-N
2†	1	O-ring, secondary seal	Buna-N
3	1	Retainer	CD 1213/15
4†	1	Seat assembly	1045 and Buna-N
			1045 and FKM
			ASTM A351 Gr. CF8M and Buna-N
			ASTM A351 Gr. CF8M and FKM
5	1	Split pin, ¾6 in × 1¾ in	Steel
6†	1	Stem	303 SS
			316 SS
7†	1	Stem screw	CD 1213/15
8†	1	Stem seal assembly with bushing	Buna-N and bronze
			FKM and bronze
19	2	Stud (continuous), bonnet	ASTM A193 Gr. B7
20	4	Stud (double ended), body	ASTM A193 Gr. B7

<sup>†</sup> Recommended spare parts. Contact Cameron for specific part numbers.

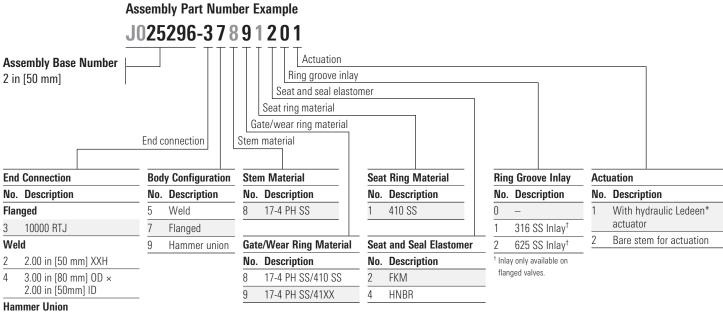
# Series DMA gate valves—7,500-psi WP—Automated

### 2-in [50-mm] seat port



Dimensional Data and Weights		
Dimension	Valve Seat Port Size for for 7,500-p	osi WP: 2 in [50 mm]
A, length, in [mm]	Weld end	9.00 [229]
	Flanged end	20.50 [521]
	Hammer union end	15.74 [400]
For flanged ends	API ring number	BX-152
	Flange ID, in [mm]	2.00 [50]
	Flange OD, in [mm]	7.88 [200]
	Flange bolts, amount; in [mm]	8; ¾ [19]
Weight, with actuator, lbm [kg]	Weld end	108 [49]
	Flanged end	169 [77]
	Hammer union end	126 [57]
Cylinder max pressure, psi [MPa]		3,000 [20.7]
Cylinder inlet/outlet connection		4X 3/8 NPT
B, height, center to top, in [mm]		19.95 [507]





8 2.00 in [50 mm] XXH 1502

hammer union

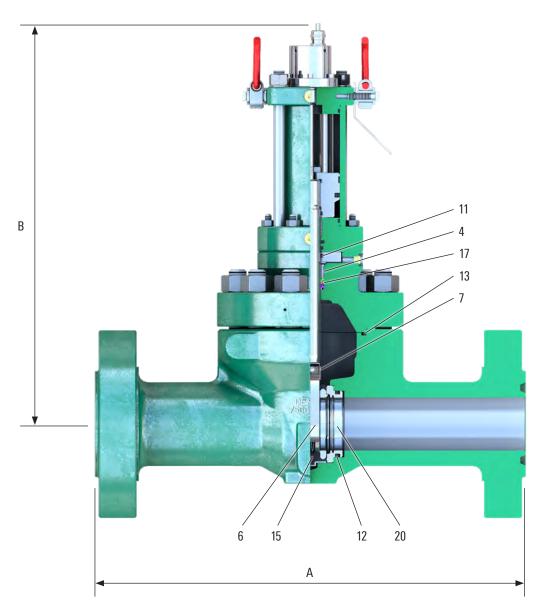
epair	Key	Qty.	Description	Valve Seat	Port Size for 7,500-psi WP: 3	in [80 mm]	Repair Kit Componen	
it	No.		Assembly Base Number—NACE Compliant	Group 1	Group 2	Group 3	Part Numbers	
				Assembly Base Number—NACE Compliant J025296	J025343	J025344		
	1	1	Body		ASTM A487 Gr. 4 Class D		-	
	2	1	Bonnet		4130		-	
	3	1	Bushing		Gar-Fil composite		-	
	4	1	Breather vent, ¼ NPT		Steel		X-213635-01	
	5	4	Capscrew socket head, ¾ UNC × 0.75 (long)		ASTM A320 Gr. L7M		-	
	6	1	Gate		17-4 PH SS with QPQ nitriding		2603688-01	
	7	1	Gate clip		3XX SS		M450480	
	8	12	Heavy hex nut, 1-8 UNC	ASTM A194 Gr. 2H	ASTM A1	194 Gr. 7	-	
	9	8	Heavy hex nut, ¾-16 UNC		ASTM A194 Gr. 7			
	10	1	Ledeen actuator model LHL 70-60 DA		Assembly		-	
	11	1	O-ring, AS-568-224, rod wiper		Buna-N		J005526-214	
	12	2	O-ring, AS-568-229, wear ring seal		HNBR		2712425-03	
					FKM		J005521-229	
	13	1	O-ring, AS-568-342, bonnet seal		HNBR		2712425-60	
					FKM		J005521-342	
	14	1	Retainer		41XX		-	
	15	1	Seat assembly	410	SS with QPQ nitriding and HN	IBR	2139742-01	
				41	0 SS with QPQ nitriding and Fk	(M	2139741-02	
	16	1	Stem		17-4 PH SS with ENP		-	
	17	1	Stem seal assembly		HNBR		X-213640-01	
				FKM			X-213640-02	
	18	12	Stud (double ended), 1-8 UNC × 4.00 (long)	ASTM A193 Gr. B7	ASTM A1	93 Gr. L7	-	
	19	8	Stud (double ended), %-16 UNC × 2.25 (long)		ASTM A320 Gr. L7		-	
	20	2	Wear ring		41XX with QPQ nitriding		M452267	
					410 SS		2139647-02	

■ Major repair kit J025177-10279—one each for one year of service.

Major repair kits listed for trim option J0XXXXX-XX891401 (17-4 PH SS stem, 17-4 PH SS with QPQ gate, HNBR seat and seals).

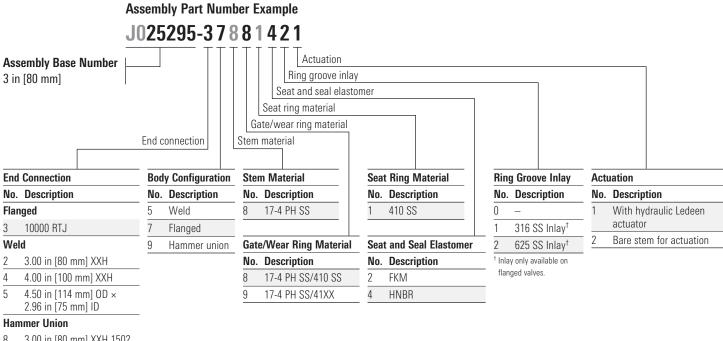
# Series DMA gate valves—7,500-psi WP—Automated

#### 3-in [80-mm] seat port



Dimension	Valve Seat Port Size fo	r for 7,500-psi	WP: 3 in [80 mm]
A, length, in [mm]	Weld end		13.00 [330]
	Flanged end		24.38 [619]
	Hammer union end	4 in	24.62 [625]
		3 in	18.88 [480]
For flanged ends	API ring number		BX-154
	Flange ID, in [mm]		3.00 [80]
	Flange OD, in [mm]		10.62 [270]
	Flange bolts, amount; in	8; 1 [25]	
Weight, with actuator, lbm [kg]	Weld end		215 [97]
	Flanged end		328 [149]
	Hammer union end	4 in	299 [135]
		3 in	241 [109]
Cylinder max pressure, psi [MPa]			3,000 [20.7]
Cylinder inlet/outlet connection			4X 3/8 NPT
B, height, center to top, in [mm]			22.26 [565]





8 3.00 in [80 mm] XXH 1502 hammer union 9 4.00 in [100 mm] XXH 1502

#### 9 4.00 in [100 mm] XXH 1502 hammer union

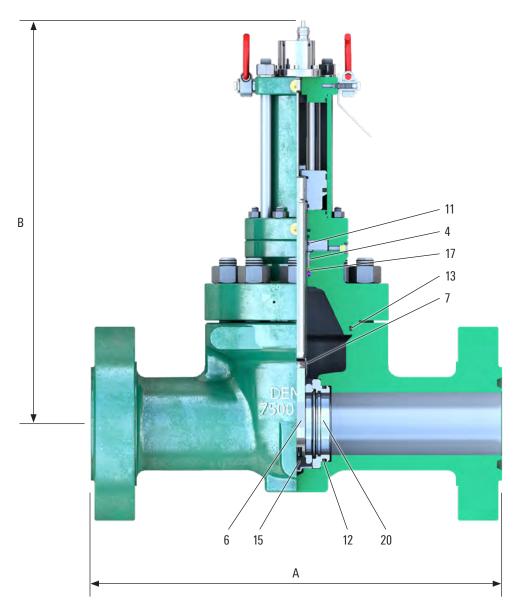
epair	Key	Qty.	Description	Valve Seat P	ort Size for 7,500-psi WP:	2 in [50 mm]	Repair Kit Componen
it	No.			Group 1	Group 2	Group 3	Part Numbers
			Assembly Base Number – NACE Compliant	J025295	J025331	J025332	
	1	1	Body		ASTM A487 Gr. 4 Class D		-
	2	1	Bonnet		4130		-
	3	1	Breather vent, ¼ NPT		Steel		-
	4	1	Bushing		Gar-Fil composite		X-213633-01
	5	4	Capscrew socket head, ¾ UNC × 0.75 (long)		ASTM A320 Gr. L7M		-
	6	1	Gate	1	7-4 PH SS with QPQ nitriding	g	X-213643-01
	7	1	Gate clip		3XX SS		X-213652-01
	8	12	Heavy hex nut, 1-8 UNC	ASTM A194 Gr. 2H	ASTM A	.194 Gr. 7	-
	9	8	Heavy hex nut, ¾-16 UNC		ASTM A194 Gr. 7		-
	10	1	Ledeen actuator model LHL 85-84 DA		Assembly		-
	11	1	O-ring, AS-568-217, rod wiper		Buna-N		J005526-217
	12	2	O-ring, AS-568-340, wear ring seal		HNBR		2712783-03
					FKM		J005521-340
	13	1	O-ring, AS-568-361, bonnet seal		HNBR		2712787-07
					FKM		J005521-361
	14	1	Retainer		41XX		-
	15	1	Seat assembly	410 \$	SS with QPQ nitriding and H	NBR	2139744-01
				410	SS with QPQ nitriding and F	KM	2139743-02
	16	1	Stem		17-4 PH SS		-
	17	1	Stem seal assembly		HNBR		X-213638-01
					FKM		X-213638-02
	18	12	Stud (double ended), 1-8 UNC × 4.50 (long)	ASTM A193 Gr. B7	ASTM A193 Gr. B7 ASTM A320 Gr. L7		
	19	8	Stud (double ended), 3/-16 UNC × 2.25 (long)		ASTM A320 Gr. L7		-
	20	2	Wear ring		41XX with QPQ nitriding		M452571
					410 SS		2139648-02

■ Major repair kit J025177-10379—one each for one year of service.

Major repair kits listed for trim option JOXXXXX-XX891401 (17-4 PH SS stem, 17-4 PH SS with QPQ gate, HNBR seat and seals).

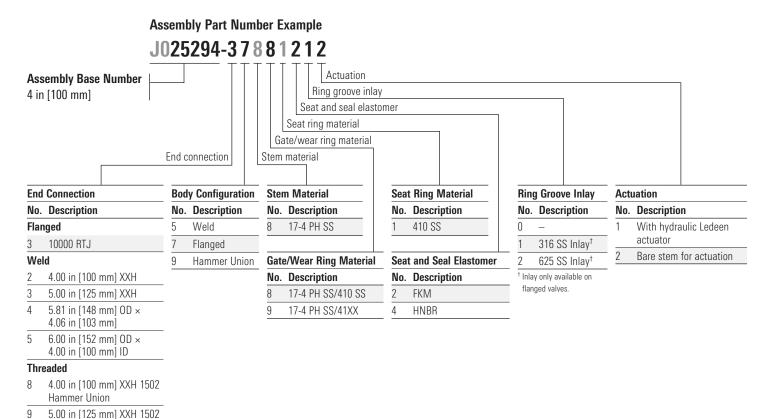
# Series DMA gate valves—7,500-psi WP—Automated

#### 4-in [100-mm] seat port



Dimensional Data and Weights Dimension	Valve Seat Port Size fo	r for 7 500-nsi	WP 4 in [100 mm]
A, length, in [mm]	Weld end	,,,,, po	16.00 [406]
• • •	Flanged end		26.38 [670]
	Hammer union end	5 in	25.62 [651]
		4 in	27.62 [702]
For flanged ends	API ring number		BX-155
	Flange ID, in [mm]		4.00 [100]
	Flange OD, in [mm]	12.44 [316]	
	Flange bolts, amount; in	[mm]	8; 11⁄8 [29]
Weight, with actuator, lbm [kg]	Weld end		311 [140]
	Flanged end		486 [220]
	Hammer union end	5 in	409 [185]
		4 in	395 [179]
Cylinder max pressure, psi [MPa]			3,000 [20.7]
Cylinder inlet/outlet connection			4X 1/2 NPT
B, height, center to top, in [mm]			25.47 [647]





#### Parts List

Hammer Union

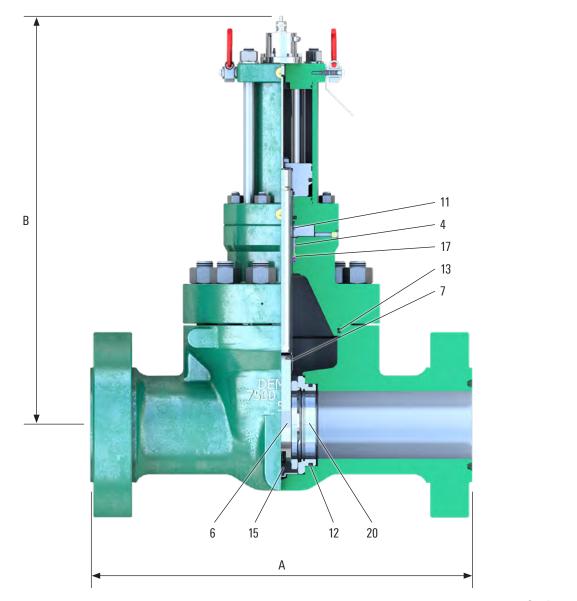
Repair	Key	Qty.	Description	Valve Seat P	ort Size for 7,500-psi WP: 4 i	in [100 mm]	Repair Kit Componen
Kit	No.		Assembly Base Number—NACE Compliant	Group 1	Group 2	Group 3	Part Numbers
				J025294	J025329	J025330	
	1	1	Body		ASTM A487 Gr. 4 Class D		-
	2	1	Bonnet		4130		-
	3	1	Breather vent, 1/8 NPT		Steel		-
	4	1	Bushing		Gar-Fil composite		X-213632-01
	5	4	Capscrew socket head, 7/16 UNC × 0.88 (long)		ASTM A320 Gr. L7M		-
	6	1	Gate		17-4 PH SS with QPQ nitriding		X-213642-01
	7	1	Gate clip		3XX SS		X-213651-01
	8	10	Heavy hex nut, 11/8-8 UNC	ASTM A194 Gr. 2H	ASTM A1	94 Gr. 7	-
	9	8	Heavy hex nut, 7/16-14 UNC		ASTM A194 Gr. 7		-
	10	1	Ledeen actuator model LHL 100-110 DA		Assembly		-
I	11	1	O-ring, AS-568-220, rod wiper		Buna-N		J005526-220
	12	2	O-ring, AS-568-349, wear ring seal		HNBR		2712787-04
					FKM		J005521-349
I	13	1	O-ring, AS-568-364, bonnet seal		HNBR		2712426-11
					FKM		J005521-364
	14	1	Retainer		41XX		-
I	15	1	Seat assembly	410	SS with QPQ nitriding and HN	BR	2139746-01
				410	0 SS with QPQ nitriding and FK	M	2139745-02
	16	1	Stem		17-4 PH SS		-
	17	1	Stem seal assembly	HNBR		X-213637-01	
					FKM		X-213637-02
	18	10	Stud (double ended), 11/8-8 UNC × 5.50 (long)	ASTM A193 Gr. B7	ASTM A32	20 Gr. L7	-
	19	8	Stud (double ended), 7/16-14 UNC × 2.63 (long)		ASTM A320 Gr. L7		-
	20	2	Wear ring		41XX with QPQ nitriding		M452290
					410 SS		2139649-02

■ Major repair kit J025177-10479—one each for one year of service.

Major repair kits listed for trim option J0XXXXX-XX891401 (17-4 PH SS stem, 17-4 PH with QPQ gate, HNBR seat and seals).

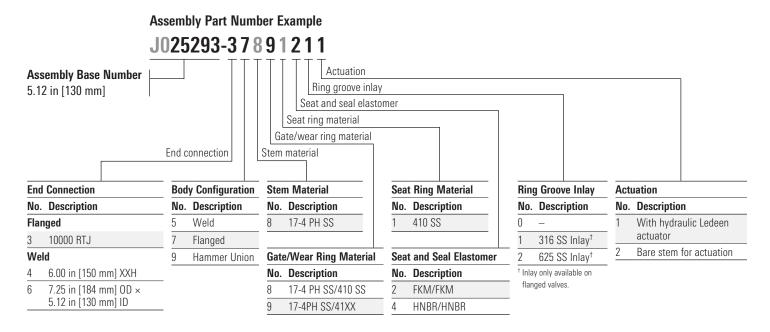
# Series DMA gate valves—7,500-psi WP—Automated

### 5.12-in [130-mm] seat port



Dimensional Data and Weights		
Dimension	Valve Seat Port Size for for 7,500-p	si WP: 5.12 in [130 mm]
A, length, in [mm]	Weld end	17.88 [454]
	Flanged end	29.00 [737]
For flanged ends	API ring number	BX-169
	Flange ID, in [mm]	5.12 [130]
	Flange OD, in [mm]	14.06 [357]
	Flange bolts, amount; in [mm]	12; 11⁄8 [29]
Weight, with actuator, lbm [kg]	Weld end	600 [272]
	Flanged end	839 [381]
Cylinder max pressure, psi [MPa]		3,000 [20.7]
Cylinder inlet/outlet connection		4X 1⁄2 NPT
B, height, center to top, in [mm]		30.66 [779]





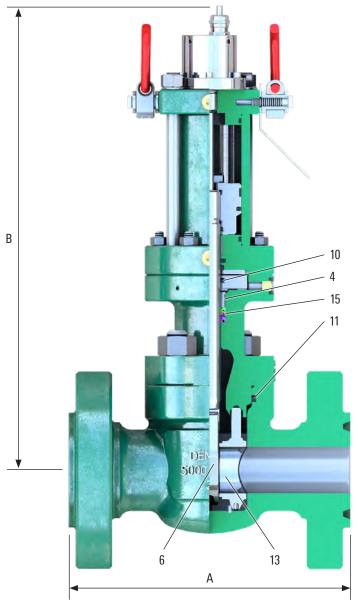
Repair	Кеу	Qty.	Description	Valve Seat Port Size for 7,500-psi WP: 5.12 in [130 mm]			Repair Kit Component
Kit	No.			Group 1	Group 2	Group 3	Part Numbers
			Assembly Base Number – NACE Compliant	J025293	J025327	J025328	
	1	1	Body		ASTM A487 Gr. 4 Class D		-
	2	1	Bonnet		4130		-
	3	1	Breather vent, 1/8 NPT		Steel		-
	4	1	Bushing		Gar-Fil composite		X-213631-01
	5	4	Capscrew socket head, 5% UNC × 1.00 (long)		ASTM A320 Gr. L7M		-
	6	1	Gate		17-4 PH SS with QPQ nitriding		X-213641-01
	7	1	Gate clip		3XX SS		X-213650-01
	8	12	Heavy hex nut, 11/4-8 UNC	ASTM A194 Gr. 2H	ASTM A	194 Gr. 7	-
	9	8	Heavy hex nut, %-11 UNC	ASTM A194 Gr. 7ML		-	
	10	1	Ledeen actuator model LHL 120-143 DA	Assembly		-	
	11	1	O-ring, AS-568-224, rod wiper	Buna-N		J005526-224	
	12	2	O-ring, AS-568-435, wear ring seal	HNBR		2726268-02	
					FKM		J005521-435
	13	1	O-ring, AS-568-446, bonnet seal		HNBR		2712425-78
					FKM		J005521-446
	14	1	Retainer		41XX		-
	15	1	Seat assembly	410	410 SS with QPQ nitriding and HNBR		2139748-01
				41	0 SS with QPQ nitriding and Fl	KM	2269500-01
	16	1	Stem		17-4 PH SS		-
	17	1	Stem seal assembly		HNBR		X-213636-01
					FKM		X-213636-02
	18	12	Stud (double ended), 11/4-8 UNC × 6.25 (long)	ASTM A193 Gr. B7	ASTM A3	20 Gr. L7	-
	19	8	Stud (double ended), %-11 UNC × 3.25 (long)		ASTM A320 Gr. L7M		-
•	20	2	Wear ring		41XX with QPQ nitriding		M452619
					410 SS		

■ Major repair kit J025177-10579—one each for one year of service.

Major repair kits listed for trim option J0XXXXX-XX891401 (17-4 PH SS stem, 17-4 PH with QPQ gate, HNBR seat and seals).

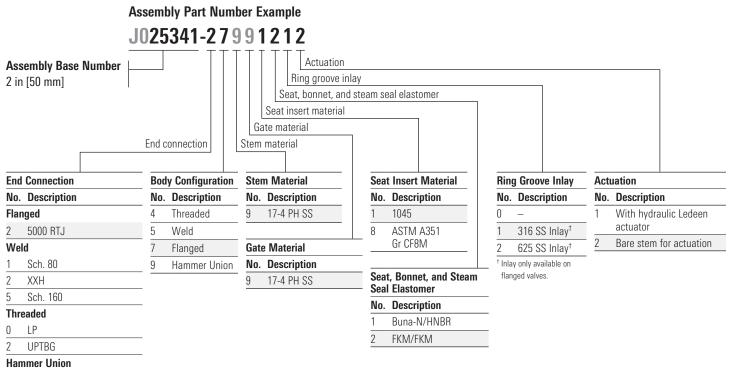
# Series DMA gate valves—5,000-psi WP—Automated

### 2-in [50-mm] seat port



Dimensional Data and Weights		
Dimension	Valve Seat Port Size for for 5,000-p	si WP: 2 in [50 mm]
A, length, in [mm]	Weld end	9.00 [229]
	Flanged end	12.12 [308]
	Hammer union end	15.74 [400]
For flanged ends	API ring number	R-24
	Flange ID, in [mm]	2.00 [50]
	Flange OD, in [mm]	8.50 [216]
	Flange bolts, amount; in [mm]	8; 1/8 [22]
Weight, with actuator, lbm [kg]	Weld, and threaded end	86 [39]
	Flanged end	131 [60]
	Hammer union end	105 [48]
Cylinder max pressure, psi [MPa]		3,000 [20.7]
Cylinder inlet/outlet connection		4X 3⁄8 NPT
B, height, center to top, in [mm]		19.56 [497]





9 2.00 in [50 mm] XXH 1502

Hammer Union

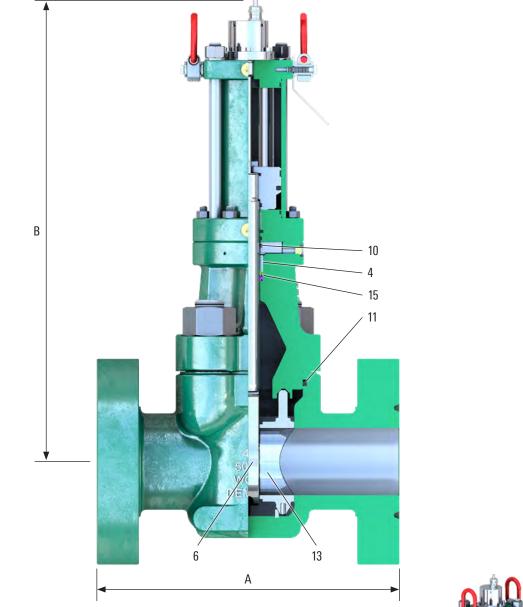
Repair Kit	Кеу	Qty.	Description Valve Seat Port Size for 5,000-psi WP: 2 in [50 mm]		Repair Kit Component	
	No.	-	Assembly Base Number – NACE Compliant	Part Numbers		
					2-in [50-mm] nominal end—threaded, flanged, weld, and hammer	J025341
			2.5-in [65-mm] nominal end—weld	J025342		
	1	1	Body	ASTM A487 Gr. 4 Class D	-	
	2	1	Bonnet	ASTM A487 Gr. 4 Class D	-	
	3	1	Breather vent, 1/2 NPT	Steel	-	
	4	1	Bushing	Gar-Fil composite	X-213635-01	
	5	4	Capscrew socket head, ¾ UNC × 0.75 (long)	ASTM A320 Gr. 7	-	
I	6	1	Gate	17-4 PH SS with QPQ nitriding	2603181-01	
	7	4	Heavy hex nut, %-9 UNC	ASTM A194 Gr. 2H	-	
	8	8	Heavy hex nut, ¾-16 UNC	ASTM A194 Gr. 7ML	-	
	9	1	Ledeen actuator model LHL 70-63 DA	Assembly	-	
	10	1	O-ring, AS-568-214, rod wiper	Buna-N	J005526-214	
	11	1	O-ring, AS-568-439, bonnet seal	Buna-N	J005526-342	
				FKM	J005531-342	
	12	1	Retainer	41XX	-	
	13	1	Seat assembly	1045 and Buna-N	J001876-011	
				1045 and FKM	J001876-012	
				ASTM A351 Gr. CF8M and Buna-N	J001876-081	
				ASTM A351 Gr. CF8M and FKM	J001876-082	
	14	1	Stem	17-4 PH SS	-	
	15	1	Stem seal assembly	HNBR	X-213640-01	
				FKM	X-213640-02	
	16	4	Stud (double ended), 3/8-16 UNC × 2.25 (long)	ASTM A320 Gr. L7M	-	
	17	8	Stud (double ended), 7%-9 UNC × 3.25 (long)	ASTM A193 Gr. B7	_	

■ Major repair kit J025216-14229—one each for one year of service.

Major repair kits listed for trim option J0XXXXX-XX991101 (17-4 PH SS with QPQ nitriding, 1045 insert, Buna-N seat, bonnet seal, and HNBR steam seal).

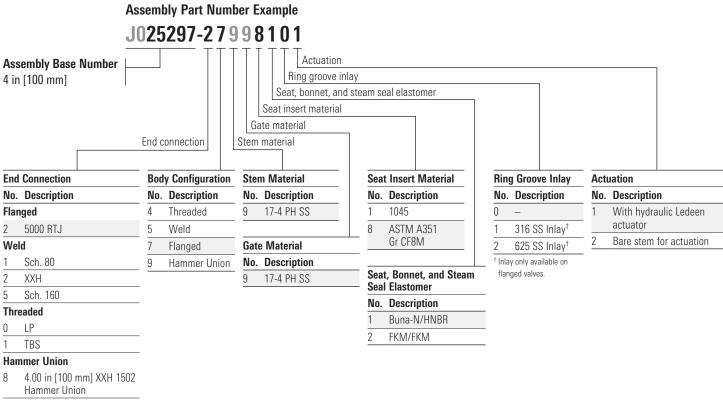
# Series DMA gate valves—5,000-psi WP—Automated

### 4-in [100-mm] seat port



Dimensional Data and Weights			
Dimension	Valve Seat Port Size for	r for 5,000-psi	WP: 4 in [100 mm]
A, length, in [mm]	Weld end		13.00 [330]
	Flanged end		18.00 [457]
	Hammer union end	5 in	22.62 [574]
		4 in	24.62 [625]
For flanged ends	API ring number		R-39
	Flange ID, in [mm]		4.00 [100]
	Flange OD, in [mm]		12.25 [311]
	Flange bolts, amount; in	[mm]	8; 1¼ [32]
Weight, with actuator, lbm [kg]	Weld, and threaded end		272 [123]
	Flanged end		409 [185]
	Hammer union end	5 in	368 [167]
		4 in	364 [165]
Cylinder max pressure, psi [MPa]			3,000 [20.7]
Cylinder inlet/outlet connection			4X 1⁄2 NPT
B, height, center to top, in [mm]			27.11 [689]





5.00 in [125 mm] XXH 1502 9 Hammer Union

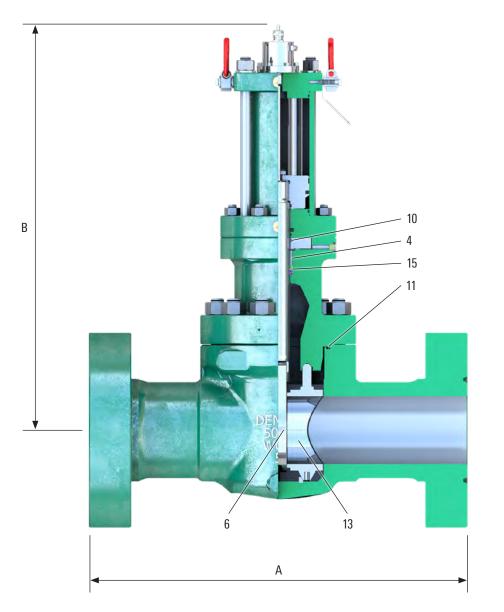
Repair	Key	Qty.	Description	Valve Seat Port Size for 5,000-psi WP: 4 in [100 mm]	Repair Kit Component
Kit	No.		Assembly Base Number—NACE Compliant	Part Numbers	
			4-in [100-mm] nominal end—threaded, flanged, weld, and hammer	J025297	
			5-in [125-mm] nominal end—weld and hammer	J025333	
	1	1	Body	ASTM A487 Gr. 4 Class D	-
	2	1	Bonnet	ASTM A487 Gr. 4 Class D	-
	3	1	Breather vent, 1/2 NPT	Steel	-
	4	1	Bushing	Gar-Fil composite	X-213632-01
	5	4	Capscrew socket head, 7/16 UNC × 0.88 (long)	ASTM A320 Gr. 7	-
I	6	1	Gate	17-4 PH SS with QPQ nitriding	2603247-01
	7	4	Heavy hex nut, 1¾ special	ASTM A194 Gr. 2H	-
	8	8	Heavy hex nut, 7/16-14 UNC	ASTM A194 Gr. 7ML	-
	9	1	Ledeen actuator model LHL 100-119 DA	Assembly	-
	10	1	O-ring, AS-568-220, rod wiper	Buna-N	J005526-220
I	11	1	O-ring, AS-568-439, bonnet seal	Buna-N	J005526-439
			-	FKM	J005531-439
	12	1	Retainer	41XX	-
I	13	1	Seat assembly	1045 and Buna-N	X-213637-01
			,	1045 and FKM	X-213637-02
				ASTM A351 Gr. CF8M and Buna-N	J002207-081
				ASTM A351 Gr. CF8M and FKM	J002207-082
	14	1	Stem	17-4 PH SS	-
	15	1	Stem seal assembly	HNBR	X-213637-01
			,	FKM	X-213637-02
	16	4	Stud (double ended), 1¾ special × 6.00 (long)	ASTM A193 Gr. B7	-
	17	8	Stud (double ended), 7/16-14 UNC × 2.63 (long)	ASTM A320 Gr. L7	_

■ Major repair kit J025216-14229—one each for one year of service.

Major repair kits listed for trim option J0XXXXX-XX991101 (17-4 PH SS with QPQ nitriding, 1045 insert, Buna-N seat, bonnet seal, and HNBR steam seal).

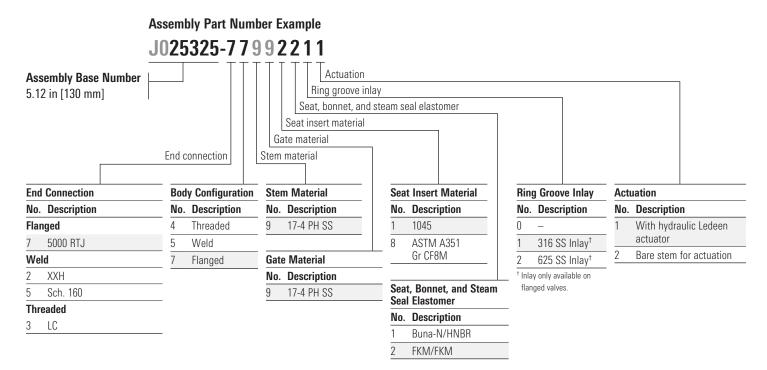
# Series DMA gate valves—5,000-psi WP—Automated

### 5.12-in [130-mm] seat port



Dimensional Data and Weights		
Dimension	Valve Seat Port Size for for 5,000-p	si WP: 5.12 in [130 mm]
A, length, in [mm]	Weld end	16.00 [406]
	Flanged end	28.62 [727]
For flanged ends	API ring number	R-44
	Flange ID, in [mm]	5.12 [130]
	Flange OD, in [mm]	14.75 [375]
	Flange bolts, amount; in [mm]	8; 1½ [38]
Weight, with actuator, lbm [kg]	Weld, and threaded end	415 [188]
	Flanged end	697 [316]
Cylinder max pressure, psi [MPa]		3,000 [20.7]
Cylinder inlet/outlet connection		4X 1/2 NPT
B, height, center to top, in [mm]		30.25 [768]





lepair	Кеу	Qty.	Oty. Description Valve Seat Port Size for 5,000-psi WP: 5.12 in [130 mm]		Repair Kit Component
Kit	No.		Assembly Base Number—NACE Compliant		Part Numbers
			5-in [125-mm] nominal end—threaded and flanged	J025325	1
			6-in [150-mm] nominal end—weld	J025334	
	1	1	Body	ASTM A487 Gr. 4 Class D	-
	2	1	Bonnet	ASTM A487 Gr. 4 Class D	-
	3	1	Breather vent, ¼ NPT	Steel	-
	4	1	Bushing	Gar-Fil composite	X-213631-01
	5	4	Capscrew socket head, ¾ UNC × 1.00 (long)	ASTM A320 Gr. L7M	-
	6	1	Gate	17-4 PH SS with QPQ nitriding	2603248-01
	7	12	Heavy hex nut, 1-8 UNC	ASTM A194 Gr. 2H	-
	8	8	Heavy hex nut, %-11 UNC	ASTM A194 Gr. 7ML	-
	9	1	Ledeen actuator model LHL 120-148 DA	Assembly	-
	10	1	O-ring, AS-568-224, rod wiper	Buna-N	J005526-224
	11	1	O-ring, AS-568-367, bonnet seal	Buna-N	J005520-367
				FKM	J005531-367
	12	1	Retainer	41XX	-
	13	1	Seat assembly	1045 and Buna-N	J021948-019
				1045 and FKM	J021948-012
				ASTM A351 Gr. CF8M and Buna-N	J021948-099
				ASTM A351 Gr. CF8M and FKM	J021948-092
	14	1	Stem	17-4 PH SS	-
	15	1	Stem seal assembly	HNBR	X-213636-01
			·	FKM	X-213636-02
	16	12	Stud (double ended), 1-8 UNC × 4.50 (long)	ASTM A193 Gr. B7	_
	17	8	Stud (double ended), %-11 UNC × 3.25 (long)	ASTM A320 Gr. L7M	-

■ Major repair kit J025216-15229—one each for one year of service.

Major repair kits listed for trim option J0XXXX-XX991101 (17-4 PH SS with QPQ nitriding, 1045 insert, Buna-N seat, bonnet seal, and HNBR stem seal).

# **Gate-Style DEMCO Valves**



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