

THE  
**REACTION WASHER**  
C O M P A N Y



TECHNICAL  
SPECIFICATION GUIDE





# REACTION WASHER SYSTEM - TECHNICAL SPECIFICATIONS

Product Specification comply with **ASTM F3394/F3394M** "Standard Specification for Hardened Steel Backup and Reaction Washers Inch and Metric Dimensions."

**NOTE:** These washers are suitable for use with fasteners covered in Specifications **A354, A193/A193M, A194/A194M, A320/A320M, F959/F959M, A449, A563/A563M and F3125.**

## Material Operations

- AISI 4140 (UNS G41400)
- 42CrMo4 (1.7225)
- RVS (316L)
- Additional Material Types per ASTM F3394/F3394M

## Hardening

- Per ASTM F436 Type 1 (min 38 HRC - max 45 HRC)

## Maximum Temperature Exposure

- Dependent upon material type specified (Contact Customer Support for Details)

## Usage Allowance

- Repeatable

## Appearance

### REACTION WASHER

- Exterior Peripheral Castles (O.D.)
- Bi-Directional Angled Helical Serrations - Two Rows (Bottom)

### BACKUP WASHER

- Round Exterior (O.D.) With Angled Helical Serration One Row (Top)
- Bi-Directional Angled Helical Serrations - Two Rows (Bottom)

## Markings

- Thread Size (Imperial and/or Metric) - Top Face
- SLR (SerraLoc Reaction Washer) or SLB (SerraLoc Backup Washer)

## Coatings

- Zinc Corrosion Protective Coating
- Thermo-diffusion
- Mechanically Deposited
- Black Oxide with corrosion repellent oil

## The use of washers is recommended in following guidelines:

- ASME-PCC1 (section 4, paragraph D and appendix M)
- API 660 (paragraph 7.8.6)
- VDI-2200-2007-07

## The SerraLoc Reaction Washer and Backup Washer meets the following requirements:

- ASTM F3394/F3394-M
- DIN 267
- ISO 4759 Compatibility

## The SerraLoc Backup Washer meets the following requirements:

- ISO 7090
- ANSI-B18.22.1

## The SerraLoc+V Reaction Washer and Backup Washer meet the following specifications:

- DIN 25201
- ISO 16130



# REACTION WASHER SYSTEM - TECHNICAL SPECIFICATIONS

## **ASTM F3394 - Specification Substitution Documentation**

The SerraLoc Reaction Washer (SRW) and SerraLoc Backup Washer (SBW) are suitable and interchangeable for use with fasteners covered in the following Specifications:

**A354** - Specification for Quenched and Tempered Alloy Steel Bolts, Studs, and Other Externally Threaded Fasteners

**A193/A193M** - Specification for Alloy-Steel and Stainless Steel Bolting for High Temperature and High Pressure Service and Other Special Purpose Applications

**A194/A194M** - Specification for Carbon Steel, Alloy Steel, and Stainless Steel Nuts for Bolts for High Pressure or High Temperature Service, or Both

**A320/A320M** - Specification for Alloy-Steel and Stainless Steel Bolting for Low-Temperature Service

**F959/F959M** - Specification for Compressible-Washer-Type Direct Tension Indicators for Use with Structural Fasteners, Inch and Metric Series

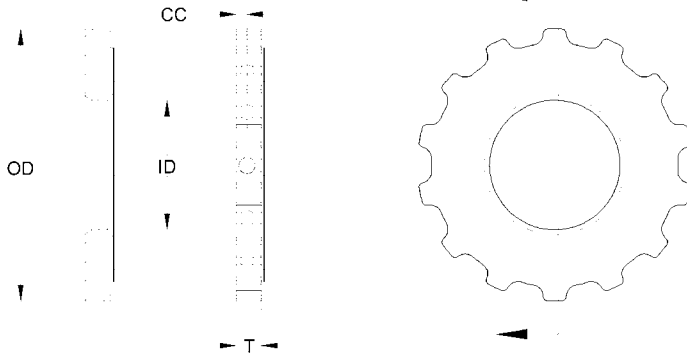
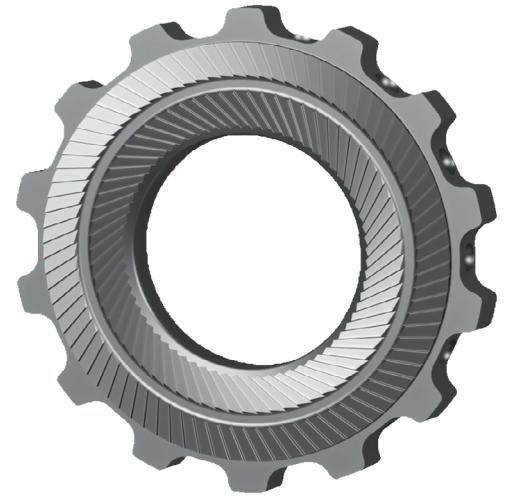
**A449** - Specification for Hex Cap Screws, Bolts and Studs, Steel, Heat Treated, 120/105/90 ksi Minimum Tensile Strength, General Use

**A563/A563M** - Specification for Carbon and Alloy Steel Nuts (A563M Withdrawn 2021)

**F3125** - Specification for High Strength Structural Bolts and Assemblies, Steel and Alloy Steel, Heat Treated, Inch Dimensions 120 ksi and 150 ksi Minimum Tensile Strength, and Metric Dimensions 830 MPa and 1040 MPa Minimum Tensile Strength



REACTION WASHER  
IMPERIAL SIZES

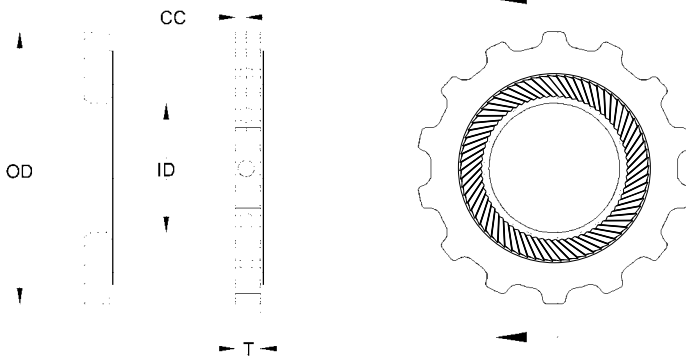


Part No.	Size	ID (min)	OD (max)	T	CC	WT (gr)
SLW008	1/2"	0.520	1.20	0.180	0.068	17.7
SLW009	9/16"	0.585	1.30	0.180	0.068	20.2
SLW010	5/8"	0.651	1.50	0.180	0.068	28.2
SLW012	3/4"	0.783	1.70	0.220	0.088	40.3
SLW014	7/8"	0.914	2.00	0.220	0.088	56.4
SLW100	1"	1.043	2.20	0.220	0.088	68.0
SLW102	1-1/8"	1.174	2.50	0.220	0.088	90.4
SLW104	1-1/4"	1.306	2.70	0.220	0.088	102.8
SLW106	1-3/8"	1.437	2.90	0.220	0.088	117.8
SLW108	1-1/2"	1.568	3.10	0.220	0.088	133.7
SLW110	1-5/8"	1.693	3.30	0.220	0.088	151.1
SLW112	1-3/4"	1.818	3.60	0.220	0.088	183.7
SLW114	1-7/8"	1.943	3.80	0.220	0.088	202.3
SLW200	2"	2.068	4.00	0.250	0.103	274.7
SLW204	2-1/4"	2.318	4.50	0.360	0.158	501.6
SLW208	2-1/2"	2.568	4.90	0.360	0.158	586.5
SLW212	2-3/4"	2.818	5.40	0.360	0.158	718.7
SLW300	3"	3.068	5.70	0.450	0.188	993.3





REACTION WASHER  
IMPERIAL SIZES

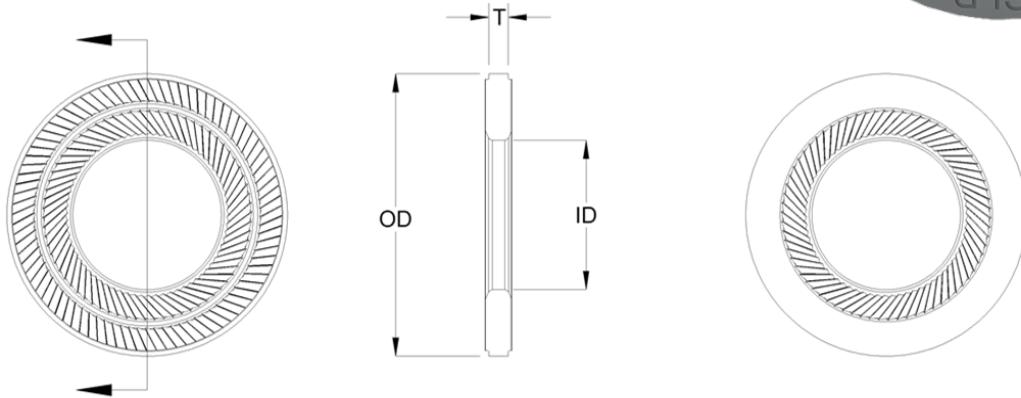


Part No.	Size	ID (min)	OD (max)	T	CC	WT (gr)
SLWV008	1/2"	0.520	1.20	0.180	0.068	17.7
SLWV009	9/16"	0.585	1.30	0.180	0.068	20.2
SLWV010	5/8"	0.651	1.50	0.180	0.068	28.2
SLWV012	3/4"	0.783	1.70	0.220	0.088	40.3
SLWV014	7/8"	0.914	2.00	0.220	0.088	56.4
SLWV100	1"	1.043	2.20	0.220	0.088	68.0
SLWV102	1-1/8"	1.174	2.50	0.220	0.088	90.4
SLWV104	1-1/4"	1.306	2.70	0.220	0.088	102.8
SLWV106	1-3/8"	1.437	2.90	0.220	0.088	117.8
SLWV108	1-1/2"	1.568	3.10	0.220	0.088	133.7
SLWV110	1-5/8"	1.693	3.30	0.220	0.088	151.1
SLWV112	1-3/4"	1.818	3.60	0.220	0.088	183.7
SLWV114	1-7/8"	1.943	3.80	0.220	0.088	202.3
SLWV200	2"	2.068	4.00	0.250	0.103	274.7
SLWV204	2-1/4"	2.318	4.50	0.360	0.158	501.6
SLWV208	2-1/2"	2.568	4.90	0.360	0.158	586.5
SLWV212	2-3/4"	2.818	5.40	0.360	0.158	718.7
SLWV300	3"	3.068	5.70	0.450	0.188	993.3





BACKUP WASHER  
IMPERIAL SIZES

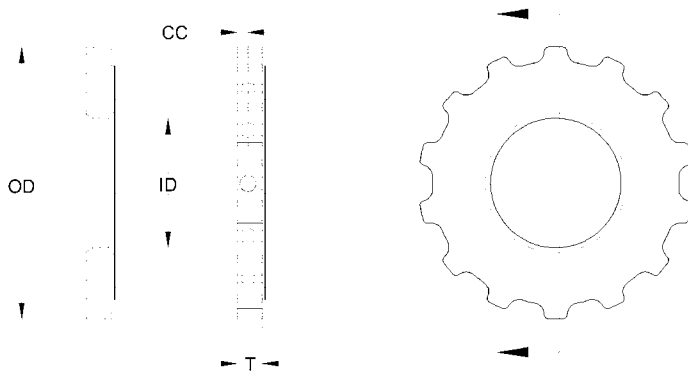


Part No.	Size	ID (min)	OD (max)	T	CC	WT (gr)
SLB008	1/2"	0.520	1.10	0.097	N/A	10.6
SLB009	9/16"	0.585	1.20	0.110	N/A	13.9
SLB010	5/8"	0.651	1.30	0.122	N/A	17.9
SLB012	3/4"	0.783	1.60	0.122	N/A	26.4
SLB014	7/8"	0.914	1.80	0.136	N/A	47.3
SLB100	1"	1.043	2.00	0.136	N/A	45.4
SLB102	1-1/8"	1.174	2.20	0.158	N/A	63.1
SLB104	1-1/4"	1.306	2.50	0.158	N/A	79.6
SLB106	1-3/8"	1.437	2.70	0.158	N/A	92.9
SLB108	1-1/2"	1.568	2.90	0.158	N/A	108.5
SLB110	1-5/8"	1.693	3.10	0.158	N/A	125.8
SLB112	1-3/4"	1.818	3.30	0.178	N/A	173.7
SLB114	1-7/8"	1.943	3.50	0.178	N/A	192.1
SLB200	2"	2.068	3.80	0.178	N/A	224.4
SLB204	2-1/4"	2.318	4.30	0.240	N/A	329.9
SLB208	2-1/2"	2.568	4.70	0.240	N/A	379.5
SLB212	2-3/4"	2.818	5.20	0.240	N/A	484.0
SLB300	3"	3.068	5.40	0.240	N/A	528.1





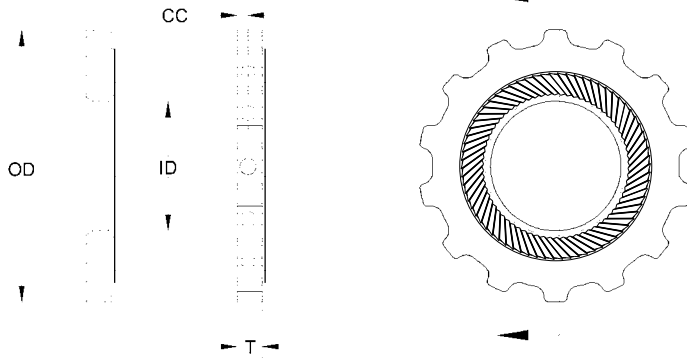
## REACTION WASHER METRIC SIZES



Part No.	Size	ID (min)	OD (max)	T	CC	WT (gr)
SLB-M14	M14	14.50	30.0	3.8	1.73	13.1
SLB-M16	M16	16.50	33.0	3.8	1.73	15.5
SLB-M18	M18	18.50	38.0	3.8	1.73	21.3
SLB-M20	M20	20.50	39.0	3.8	1.73	21.1
SLB-M22	M22	23.00	42.0	3.8	1.73	23.8
SLB-M24	M24	25.00	48.0	4.6	1.73	40.4
SLB-M27	M27	28.00	53.0	4.6	1.73	49.0
SLB-M30	M30	31.00	59.0	5.6	2.24	75.4
SLB-M33	M33	34.00	64.0	5.6	2.24	88.3
SLB-M36	M36	37.00	70.0	5.6	2.24	107.5
SLB-M39	M39	40.00	75.0	5.6	2.24	123.5
SLB-M42	M42	43.00	82.0	5.6	2.24	157.1
SLB-M45	M45	46.00	87.0	5.6	2.24	178.1
SLB-M48	M48	49.00	94.0	5.6	2.24	212.7
SLB-M52	M52	53.00	98.0	6.4	2.62	252.5
SLB-M56	M56	57.00	110.0	8.3	3.43	413.2
SLB-M60	M60	61.00	110.0	8.3	3.43	385.6
SLB-M64	M64	65.00	122.0	9.2	4.01	553.0
SLB-M68	M68	69.00	122.0	9.2	4.01	518.5
SLB-M72	M72	73.00	134.0	9.2	4.01	655.3
SLB-M76	M76	77.00	134.0	9.2	4.01	616.5
SLB-M80	M80	81.00	144.0	11.5	4.78	924.7



## REACTION WASHER METRIC SIZES

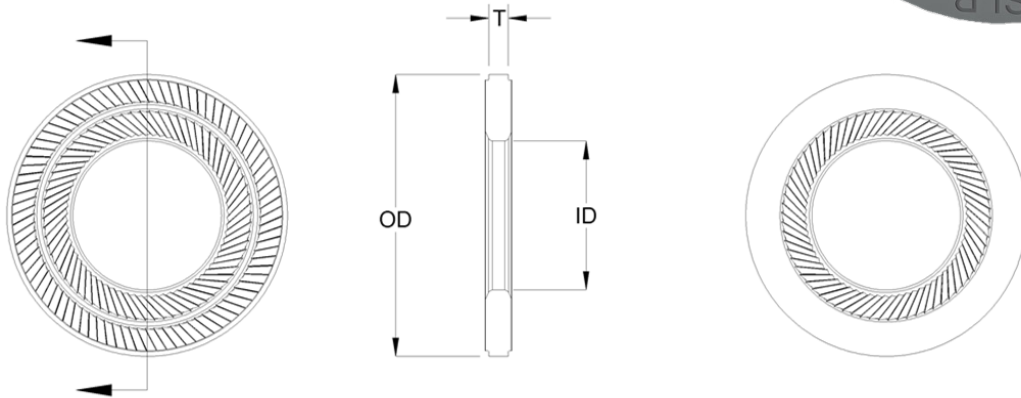


Part No.	Size	ID (min)	OD (max)	T	CC	WT (gr)
SLBV-M14	M14	14.50	30.0	3.8	1.73	13.1
SLBV-M16	M16	16.50	33.0	3.8	1.73	15.5
SLBV-M18	M18	18.50	38.0	3.8	1.73	21.3
SLBV-M20	M20	20.50	39.0	3.8	1.73	21.1
SLBV-M22	M22	23.00	42.0	3.8	1.73	23.8
SLBV-M24	M24	25.00	48.0	4.6	1.73	40.4
SLBV-M27	M27	28.00	53.0	4.6	1.73	49.0
SLBV-M30	M30	31.00	59.0	5.6	2.24	75.4
SLBV-M33	M33	34.00	64.0	5.6	2.24	88.3
SLBV-M36	M36	37.00	70.0	5.6	2.24	107.5
SLBV-M39	M39	40.00	75.0	5.6	2.24	123.5
SLBV-M42	M42	43.00	82.0	5.6	2.24	157.1
SLBV-M45	M45	46.00	87.0	5.6	2.24	178.1
SLBV-M48	M48	49.00	94.0	5.6	2.24	212.7
SLBV-M52	M52	53.00	98.0	6.4	2.62	252.5
SLBV-M56	M56	57.00	110.0	8.3	3.43	413.2
SLBV-M60	M60	61.00	110.0	8.3	3.43	385.6
SLBV-M64	M64	65.00	122.0	9.2	4.01	553.0
SLBV-M68	M68	69.00	122.0	9.2	4.01	518.5
SLBV-M72	M72	73.00	134.0	9.2	4.01	655.3
SLBV-M76	M76	77.00	134.0	9.2	4.01	616.5
SLBV-M80	M80	81.00	144.0	11.5	4.78	924.7





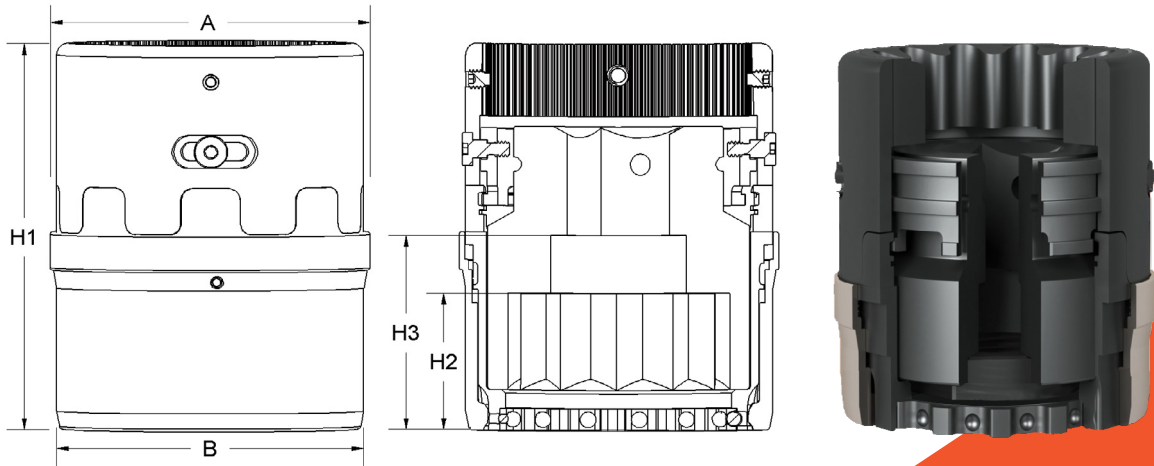
BACKUP WASHER  
METRIC SIZES



Part No.	Size	ID (min)	OD (max)	T	CC	WT (gr)
SLB-M14	M14	14.50	27.0	3.1	N/A	9.4
SLB-M16	M16	16.50	29.0	3.1	N/A	9.9
SLB-M18	M18	18.50	33.0	3.1	N/A	11.8
SLB-M20	M20	20.50	36.0	3.1	N/A	15.3
SLB-M22	M22	23.00	38.0	3.4	N/A	18.9
SLB-M24	M24	25.00	44.0	3.4	N/A	26.3
SLB-M27	M27	28.00	50.0	4.0	N/A	36.4
SLB-M30	M30	31.00	56.0	4.0	N/A	48.5
SLB-M33	M33	34.00	61.0	4.0	N/A	57.7
SLB-M36	M36	37.00	67.0	4.0	N/A	72.2
SLB-M39	M39	40.00	72.0	4.0	N/A	84.6
SLB-M42	M42	43.00	78.0	4.6	N/A	117.8
SLB-M45	M45	46.00	83.0	4.6	N/A	129.3
SLB-M48	M48	49.00	89.0	4.6	N/A	147.2
SLB-M52	M52	53.00	95.0	4.6	N/A	166.6
SLB-M56	M56	57.00	107.0	6.1	N/A	331.8
SLB-M60	M60	61.00	107.0	6.1	N/A	308.0
SLB-M64	M64	65.00	117.0	6.1	N/A	403.1
SLB-M68	M68	69.00	117.0	6.1	N/A	381.0
SLB-M72	M72	73.00	128.0	6.1	N/A	474.9
SLB-M76	M76	77.00	128.0	6.1	N/A	455.9
SLB-M80	M80	81.00	136.0	6.1	N/A	541.1



## QUICK CONNECT DRIVE SYSTEM STANDARD SIZES



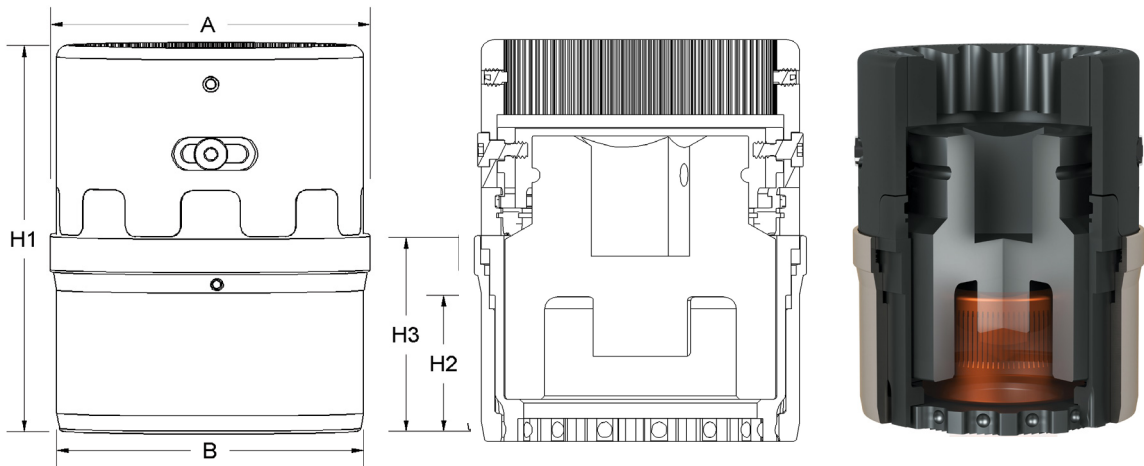
Part No.	SQ	Washer Size (mm/in)	Socket Size A.F.	ØA	ØB	H1	H2 (min)	H3 (min)
SQCDS075 - M30	3/4"	M20	30mm	68,1 mm	52 mm	70,2 mm	27,6 mm	33,1 mm
SQCDS075-M32 or 104		M22/3/4"	32mm - 1-1/4"	68,1 mm	55,5 mm	77,7 mm	33,2 mm	39,8 mm
SQCDS075-M36 or 107		M24/7/8"	36mm - 1-7/16"	68,1 mm	60 mm	79,9 mm	35,2 mm	42,2 mm
SQCDS075-M41 or 110		M27/1"	41mm - 1-5/8"	68,1 mm	65,4 mm	84,9 mm	38,2 mm	45,8 mm
SQCDS075-M46 or 113		M30/1-1/8"	46mm - 1-13/16"	73,6 mm	73,6 mm	91,1 mm	41,2 mm	49,4 mm
SQCDS075-M50 or 200		M33/1-1/4"	50mm - 2"	84,2 mm	81,5 mm	98,6 mm	44,2 mm	53 mm
SQCDS075-M55 or 203		M36/1-3/8"	55mm - 2-3/16"	90,6 mm	87,9 mm	103,5 mm	47,2 mm	56,6 mm
SQCDS075-M60 or 206		M39/1-1/2"	60mm - 2-3/8"	96,5 mm	93,5 mm	107,8 mm	50,2 mm	60,2 mm

SQCDS100-M41 - 110	1"	M27/1"	41mm - 1-5/8"	100,8 mm	68,1 mm	90 mm	38,2 mm	45,8 mm
SQCDS100-M46 or 113		M30/1-1/8"	46mm - 1-13/16"	100,8 mm	74,9 mm	99,2 mm	41,2 mm	49,4 mm
SQCDS100-M50 or 200		M33/1-1/4"	50mm - 2"	100,8 mm	81,5 mm	111,3 mm	44,2 mm	53 mm
SQCDS100-M55 or 203		M36/1-3/8"	55mm - 2-3/16"	100,8 mm	87,9 mm	111,9 mm	47,2 mm	56,6 mm
SQCDS100-M60 or 206		M39/1-1/2"	60mm - 2-3/8"	100,8 mm	93,6 mm	117,4 mm	50,2 mm	60,2 mm
SQCDS100-M65 or 209		M42/1-5/8"	65mm - 2-9/16"	106,5 mm	100,8 mm	125,5 mm	53,6 mm	64,3 mm
SQCDS100-M70 or 212		M45/1-3/4"	70mm - 2-3/4"	111,3 mm	106,2 mm	126,6 mm	56,6 mm	67,9 mm
SQCDS100-M75 or 216		M48/1-7/8"	75mm - 2-15/16"	121,1 mm	114,7 mm	130,1 mm	59,6 mm	71,5 mm
SQCDS100-M80 or 302		M52/2"	80mm - 3-1/8"	124,7 mm	121,1 mm	136,2 mm	64,8 mm	77,8 mm

SQCDS150-M60 or 206	1-1/2"	M39/1-1/2"	60mm - 2-3/8"	135,9 mm	95,3 mm	125,7 mm	50,2 mm	60,2 mm
SQCDS150-M65 or 209		M42/1-5/8"	65mm - 2-9/16"	135,9 mm	108,9 mm	128,8 mm	53,6 mm	64,3 mm
SQCDS150-M70 or 212		M45/1-3/4"	70mm - 2-3/4"	135,9 mm	114,8 mm	130,4 mm	56,6 mm	67,9 mm
SQCDS150-M75 or 215		M48/1-7/8"	75mm - 2-15/16"	135,9 mm	120,1 mm	131,5 mm	59,6 mm	71,5 mm
SQCDS150-M80 or 302		M52/2"	80mm - 3-1/8"	135,9 mm	129,7 mm	138,4 mm	64,8 mm	77,8 mm
SQCDS150-M56 or 308		M56/2-1/4"	85mm - 3-1/2"	142,7 mm	142,6 mm	143,1 mm	74,2 mm	89 mm
SQCDS150-M90		M60	90mm	148,9 mm	149,9 mm	150,2 mm	78,2 mm	93,8 mm
SQCDS150-M85 or 314		M64/2-1/2"	95mm - 3-7/8"	154,5 mm	154,4 mm	156 mm	82,2 mm	98,6 mm
SQCDS150-M100		M68	100mm	161,3 mm	160,3 mm	160 mm	86,2 mm	103,4 mm
SQCDS150-M72 or 404		M72/2-3/4"	105mm - 4-1/4"	166,3 mm	166,2 mm	163,3 mm	90,2 mm	108,2 mm
SQCDS150-M110		M76	110mm	172,5 mm	172,4 mm	168,3 mm	94,2 mm	113 mm
SQCDS150-M115 or 410		M80/3"	115mm - 4-5/8"	178,1 mm	178 mm	173,9 mm	102,8 mm	123,4 mm



## QUICK CONNECT DRIVE SYSTEM DRIVING CAP SCREWS



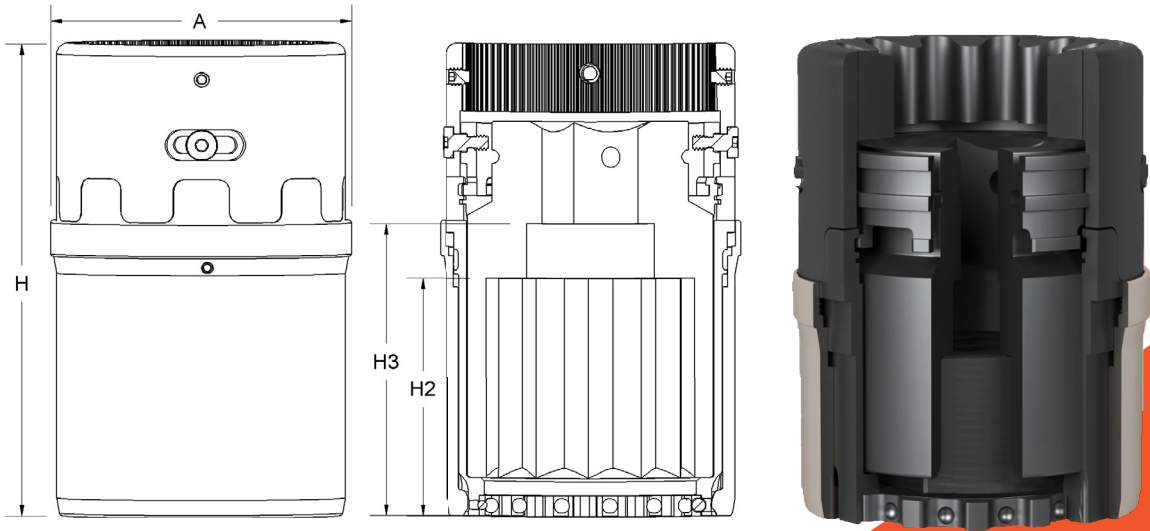
Part No.	SQ	Washer Size (mm/in)	Socket Size A.F.	ØA	ØB	H1	H2 (min)	H3 (min)
SQCDC075 - M30	3/4"	M20	30mm	68,1 mm	52 mm	70,2 mm	27,6 mm	33,1 mm
SQCDC075-M32 or 104		M22/3/4"	32mm - 1-1/4"	68,1 mm	55,5 mm	77,7 mm	33,2 mm	39,8 mm
SQCDC075-M36 or 107		M24/7/8"	36mm - 1-7/16"	68,1 mm	60 mm	79,9 mm	35,2 mm	42,2 mm
SQCDC075-M41 or 110		M27/1"	41mm - 1-5/8"	68,1 mm	65,4 mm	84,9 mm	38,2 mm	45,8 mm
SQCDC075-M46 or 113		M30/1-1/8"	46mm - 1-13/16"	73,6 mm	73,6 mm	91,1 mm	41,2 mm	49,4 mm
SQCDC075-M50 or 200		M33/1-1/4"	50mm - 2"	84,2 mm	81,5 mm	98,6 mm	44,2 mm	53 mm
SQCDC075-M55 or 203		M36/1-3/8"	55mm - 2-3/16"	90,6 mm	87,9 mm	103,5 mm	47,2 mm	56,6 mm
SQCDC075-M60 or 206		M39/1-1/2"	60mm - 2-3/8"	96,5 mm	93,5 mm	107,8 mm	50,2 mm	60,2 mm

SQCDC100-M41 - 110	1"	M27/1"	41mm - 1-5/8"	100,8 mm	68,1 mm	90 mm	38,2 mm	45,8 mm
SQCDC100-M46 or 113		M30/1-1/8"	46mm - 1-13/16"	100,8 mm	74,9 mm	99,2 mm	41,2 mm	49,4 mm
SQCDC100-M50 or 200		M33/1-1/4"	50mm - 2"	100,8 mm	81,5 mm	111,3 mm	44,2 mm	53 mm
SQCDC100-M55 or 203		M36/1-3/8"	55mm - 2-3/16"	100,8 mm	87,9 mm	111,9 mm	47,2 mm	56,6 mm
SQCDC100-M60 or 206		M39/1-1/2"	60mm - 2-3/8"	100,8 mm	93,6 mm	117,4 mm	50,2 mm	60,2 mm
SQCDC100-M65 or 209		M42/1-5/8"	65mm - 2-9/16"	106,5 mm	100,8 mm	125,5 mm	53,6 mm	64,3 mm
SQCDC100-M70 or 212		M45/1-3/4"	70mm - 2-3/4"	111,3 mm	106,2 mm	126,6 mm	56,6 mm	67,9 mm
SQCDC100-M75 or 216		M48/1-7/8"	75mm - 2-15/16"	121,1 mm	114,7 mm	130,1 mm	59,6 mm	71,5 mm
SQCDC100-M80 or 302		M52/2"	80mm - 3-1/8"	124,7 mm	121,1 mm	136,2 mm	64,8 mm	77,8 mm

SQCDC150-M60 or 206	1-1/2"	M39/1-1/2"	60mm - 2-3/8"	135,9 mm	95,3 mm	125,7 mm	50,2 mm	60,2 mm
SQCDC150-M65 or 209		M42/1-5/8"	65mm - 2-9/16"	135,9 mm	108,9 mm	128,8 mm	53,6 mm	64,3 mm
SQCDC150-M70 or 212		M45/1-3/4"	70mm - 2-3/4"	135,9 mm	114,8 mm	130,4 mm	56,6 mm	67,9 mm
SQCDC150-M75 or 215		M48/1-7/8"	75mm - 2-15/16"	135,9 mm	120,1 mm	131,5 mm	59,6 mm	71,5 mm
SQCDC150-M80 or 302		M52/2"	80mm - 3-1/8"	135,9 mm	129,7 mm	138,4 mm	64,8 mm	77,8 mm
SQCDC150-M56 or 308		M56/2-1/4"	85mm - 3-1/2"	142,7 mm	142,6 mm	143,1 mm	74,2 mm	89 mm
SQCDC150-M90		M60	90mm	148,9 mm	149,9 mm	150,2 mm	78,2 mm	93,8 mm
SQCDC150-M85 or 314		M64/2-1/2"	95mm - 3-7/8"	154,5 mm	154,4 mm	156 mm	82,2 mm	98,6 mm
SQCDC150-M100		M68	100mm	161,3 mm	160,3 mm	160 mm	86,2 mm	103,4 mm
SQCDC150-M72 or 404		M72/2-3/4"	105mm - 4-1/4"	166,3 mm	166,2 mm	163,3 mm	90,2 mm	108,2 mm
SQCDC150-M110		M76	110mm	172,5 mm	172,4 mm	168,3 mm	94,2 mm	113 mm
SQCDC150-M115 or 410		M80/3"	115mm - 4-5/8"	178,1 mm	178 mm	173,9 mm	102,8 mm	123,4 mm



## QUICK CONNECT DRIVE SYSTEM DEEP WELL



Part No.	SQ	Washer Size (mm/in)	Socket Size A.F.	ØA	ØB	H1	H2 (min)	H3 (min)
SQCDD075 - M30	3/4"	M20	30mm	68,1 mm	52 mm	86,7 mm	27,6 mm	62,3 mm
SQCDD075-M32 or 104		M22/3/4"	32mm - 1-1/4"	68,1 mm	55,5 mm	90,6 mm	33,2 mm	68,3 mm
SQCDD075-M36 or 107		M24/7/8"	36mm - 1-7/16"	68,1 mm	60 mm	91,9 mm	35,2 mm	67,1 mm
SQCDD075-M41 or 110		M27/1"	41mm - 1-5/8"	68,1 mm	65,4 mm	93,6 mm	38,2 mm	52,4 mm
SQCDD075-M46 or 113		M30/1-1/8"	46mm - 1-13/16"	73,6 mm	73,6 mm	96 mm	41,2 mm	73 mm
SQCDD075-M50 or 200		M33/1-1/4"	50mm - 2"	84,2 mm	81,5 mm	103,9 mm	44,2 mm	66,6 mm
SQCDD075-M55 or 203		M36/1-3/8"	55mm - 2-3/16"	90,6 mm	87,9 mm	114,8 mm	47,2 mm	74,1 mm
SQCDD075-M60 or 206		M39/1-1/2"	60mm - 2-3/8"	96,5 mm	93,5 mm	116 mm	50,2 mm	69,3 mm
SQCDD100-M41 - 110	1"	M27/1"	41mm - 1-5/8"	100,8 mm	68,1 mm	101,4 mm	38,2 mm	71,5 mm
SQCDD100-M46 or 113		M30/1-1/8"	46mm - 1-13/16"	100,8 mm	74,9 mm	111,4 mm	41,2 mm	77,7 mm
SQCDD100-M50 or 200		M33/1-1/4"	50mm - 2"	100,8 mm	81,5 mm	114,9 mm	44,2 mm	77,6 mm
SQCDD100-M55 or 203		M36/1-3/8"	55mm - 2-3/16"	100,8 mm	87,9 mm	121,3 mm	47,2 mm	80,6 mm
SQCDD100-M60 or 206		M39/1-1/2"	60mm - 2-3/8"	100,8 mm	93,6 mm	132,1 mm	50,2 mm	88,7 mm
SQCDD100-M65 or 209		M42/1-5/8"	65mm - 2-9/16"	106,5 mm	100,8 mm	140,4 mm	53,6 mm	93,2 mm
SQCDD100-M70 or 212		M45/1-3/4"	70mm - 2-3/4"	111,3 mm	106,2 mm	145,8 mm	56,6 mm	96,3 mm
SQCDD100-M75 or 216		M48/1-7/8"	75mm - 2-15/16"	121,1 mm	114,7 mm	152,8 mm	59,6 mm	97,7 mm
SQCDD100-M80 or 302		M52/2"	80mm - 3-1/8"	124,7 mm	121,1 mm	160,7 mm	64,8 mm	104,4 mm
SQCDD150-M60 or 206	1-1/2"	M39/1-1/2"	60mm - 2-3/8"	135,9 mm	95,3 mm	146,9 mm	50,2 mm	101,8 mm
SQCDD150-M65 or 209		M42/1-5/8"	65mm - 2-9/16"	135,9 mm	108,9 mm	156,6 mm	53,6 mm	101,3 mm
SQCDD150-M70 or 212		M45/1-3/4"	70mm - 2-3/4"	135,9 mm	114,8 mm	156,9 mm	56,6 mm	98,7 mm
SQCDD150-M75 or 215		M48/1-7/8"	75mm - 2-15/16"	135,9 mm	120,1 mm	165 mm	59,6 mm	104,5 mm
SQCDD150-M80 or 302		M52/2"	80mm - 3-1/8"	135,9 mm	129,7 mm	168,6 mm	64,8 mm	106,9 mm
SQCDD150-M56 or 308		M56/2-1/4"	85mm - 3-1/2"	142,7 mm	142,6 mm	175,2 mm	74,2 mm	111,5 mm
SQCDD150-M90		M60	90mm	148,9 mm	149,9 mm	177,6 mm	78,2 mm	109,5 mm
SQCDD150-M85 or 314		M64/2-1/2"	95mm - 3-7/8"	154,5 mm	154,4 mm	179,6 mm	82,2 mm	105,8 mm
SQCDD150-M100		M68	100mm	161,3 mm	160,3 mm	183,1 mm	86,2 mm	109,4 mm
SQCDD150-M72 or 404		M72/2-3/4"	105mm - 4-1/4"	166,3 mm	166,2 mm	184,8 mm	90,2 mm	111,7 mm
SQCDD150-M110		M76	110mm	172,5 mm	172,4 mm	191,6 mm	94,2 mm	121,5 mm
SQCDD150-M115 or 410		M80/3"	115mm - 4-5/8"	178,1 mm	178 mm	199,3 mm	102,8 mm	128,2 mm