

HYTORC WASHERSYSTEEM

Technische specificaties

Materiaal	<ul style="list-style-type: none">• AISI 4140 (UNS G41400)• 42CrMo4 (1.7225)• RVS (316L)• Elk ander materiaal
Gehard volgens	ASTM F436 Type 1 (min. 300HV)
Max. temperatuur	540°C (1,000°F), herbruikbaar tot 400 °C (750°F).
Uiterlijk	Gekarteld buitenprofiel t.b.v het axiaal en buigmomentvrij aanhalen.
Markeringen	Schroefdraadmaat aan één zijde.
Certificaat	Volgens EN 10204 – 2.2. Overige certificaten waaronder 3.1 en 3.2 op aanvraag leverbaar.
Coating	<ul style="list-style-type: none">• Chemisch gezwart en behandeld met een corrosiewerende olie.• Thermisch verzinkt ISO 1461• Boltcoat[®] GLEIT-μ[®] (MoS₂)

Het gebruik van onderleggingen wordt aanbevolen in de volgende richtlijnen:

- ASME-PCC 1 (sectie 4, paragraaf d en appendix M)
- API 660 (paragraaf 7.8.6)
- VDI-2200-2007-07
- CSW-43-N, versie 6, 26-06-2015

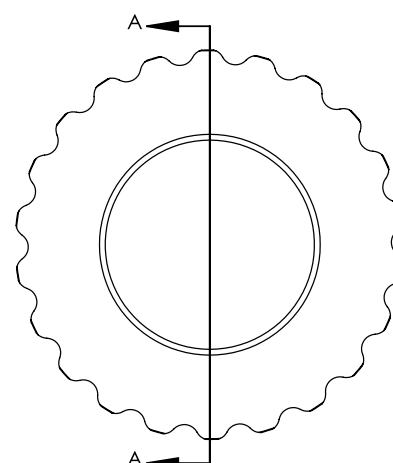
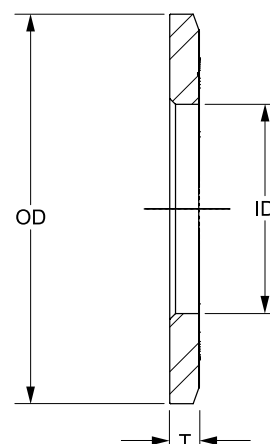
De HYTORC Washer voldoet aan de normen:

- ISO7090
- ANSI-B 18.22.1
- DIN 267
- ISO 4759

HYTORC Washer

Metriek

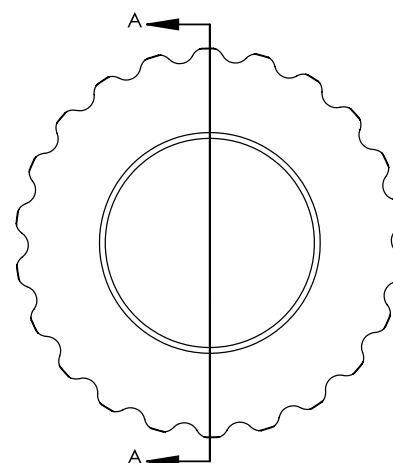
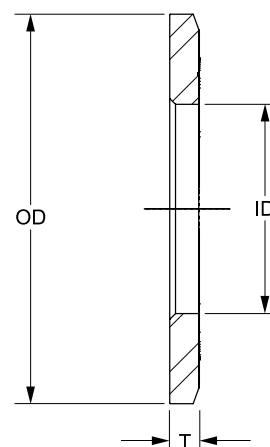
Art. no.	Maat	ID	OD	T	Gewicht
ZRW-M14	M14	15,0 mm	28,4 mm	3,0 mm	-
ZRW-M16	M16	17,0 mm	31,0 mm	3,0 mm	-
ZRW-M18	M18	19,0 mm	36,4 mm	3,0 mm	-
ZRW-M20	M20	21,0 mm	37,0 mm	3,3 mm	16,0 gr
ZRW-M22	M22	23,0 mm	40,6 mm	3,3 mm	20,5 gr
ZRW-M24	M24	25,0 mm	47,4 mm	4,1 mm	37,5 gr
ZRW-M27	M27	28,0 mm	52,2 mm	4,1 mm	39,5 gr
ZRW102-M30	M30 (1-1/8")	30,8 mm	58,6 mm	4,8 mm	62,5 gr
ZRW104-M33	M33 (1-1/4")	33,8 mm	63,3 mm	4,8 mm	70,6 gr
ZRW106-M36	M36 (1-3/8")	36,8 mm	69,6 mm	4,8 mm	89,6 gr
ZRW108-M39	M39 (1-1/2")	39,8 mm	74,4 mm	4,8 mm	101,1 gr
ZRW110-M42	M42 (1-5/8")	42,8 mm	80,7 mm	6,4 mm	149,4 gr
ZRW112-M45	M45 (1-3/4")	45,8 mm	85,2 mm	6,4 mm	167,0 gr
ZRW114-M48	M48 (1-7/8")	48,8 mm	91,9 mm	6,4 mm	195,0 gr
ZRW200-M52	M52 (2")	52,8 mm	96,2 mm	6,4 mm	209,0 gr
ZRW204-M56	M56 (2-1/4")	58,5 mm	108,7 mm	8,2 mm	315,0 gr
ZRW-M60	M60	62,0 mm	108,7 mm	8,2 mm	294,7 gr
ZRW208-M64	M64 (2-1/2")	66,0 mm	121,1 mm	9,1 mm	436,5 gr
ZRW-M68	M68	70,1 mm	121,1 mm	9,1 mm	407,0 gr
ZRW-M72	M72	74,0 mm	133,7 mm	9,1 mm	528,0 gr
ZRW-M76	M76	78,0 mm	133,7 mm	9,1 mm	503,0 gr
ZRW-M80	M80	82,0 mm	142,1 mm	11,2 mm	687,0 gr



HYTORC Washer

Imperiaal

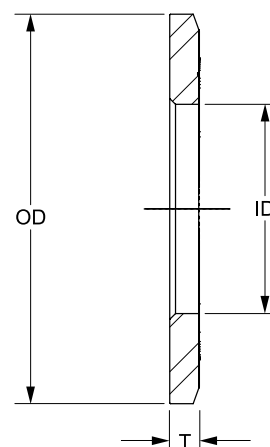
Art. no.	Size	ID	OD	T	Gewicht
ZRW008	1/2"	13,5 mm	28,4 mm	3,3 mm	-
ZRW009	9/16"	15,1 mm	31,0 mm	3,3 mm	-
ZRW010	5/8"	16,7 mm	36,4 mm	3,6 mm	17,5 gr
ZRW012	3/4"	20,6 mm	40,6 mm	4,1 mm	25,5 gr
ZRW014	7/8"	23,8 mm	47,4 mm	4,1 mm	34,7 gr
ZRW100	1"	27,0 mm	52,2 mm	4,2 mm	41,0 gr
ZRW102-M30	1-1/8" (M30)	30,8 mm	58,6 mm	4,8 mm	62,5 gr
ZRW104-M33	1-1/4" (M33)	33,8 mm	63,3 mm	4,8 mm	70,6 gr
ZRW106-M36	1-3/8" (M36)	36,8 mm	69,6 mm	4,8 mm	89,6 gr
ZRW108-M39	1-1/2" (M39)	39,8 mm	74,4 mm	4,8 mm	101,1 gr
ZRW110-M42	1-5/8" (M42)	42,8 mm	80,7 mm	6,4 mm	149,4 gr
ZRW112-M45	1-3/4" (M45)	45,8 mm	85,2 mm	6,4 mm	167,0 gr
ZRW114-M48	1-7/8" (M48)	48,8 mm	91,9 mm	6,4 mm	195,0 gr
ZRW200-M52	2" (M52)	52,8 mm	96,2 mm	6,4 mm	209,0 gr
ZRW204-M56	2-1/4" (M56)	58,5 mm	108,7 mm	8,2 mm	315,0 gr
ZRW208-M64	2-1/2" (M64)	66,0 mm	121,1 mm	9,1 mm	436,5 gr
ZRW212	2-3/4"	71,9 mm	133,7 mm	9,1 mm	540,0 gr
ZRW300	3"	78,2 mm	142,1 mm	11,2 mm	776,0 gr
ZRW304	3-1/4"	84,6 mm	156,6 mm	11,2 mm	
ZRW308	3-1/2"	90,9 mm	178,7 mm	11,2 mm	



HYTORC Washer SHCS

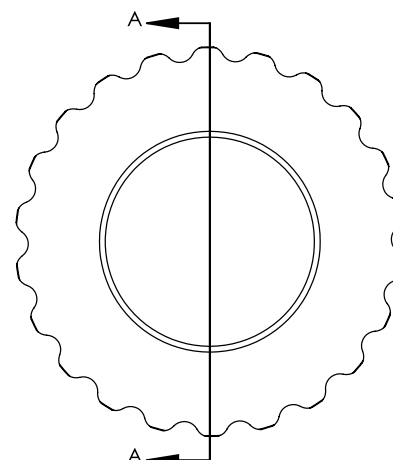
Metriek

Art. no.	Maat	ID	OD	T
ZRW010-M16-SHCS	M16	16,6 mm	28,4 mm	3,1 mm
ZRW-M18-SHCS	M18	19,0 mm	31,0 mm	3,1 mm
ZRW-M20-SHCS	M20	20,8 mm	36,4 mm	3,1 mm
ZRW-M22-SHCS	M22	22,8 mm	37,0 mm	3,3 mm
ZRW-M24-SHCS	M24	24,8 mm	40,6 mm	3,3 mm
ZRW-M27-SHCS	M27	28,3 mm	47,4 mm	3,8 mm
ZRW-M30-SHCS	M30	31,2 mm	52,2 mm	3,8 mm
ZRW-M33-SHCS	M33	34,3 mm	58,6 mm	4,8 mm
ZRW-M36-SHCS	M36	37,3 mm	63,3 mm	4,8 mm
ZRW-M42-SHCS	M42	44,0 mm	74,4 mm	4,8 mm



Imperiaal

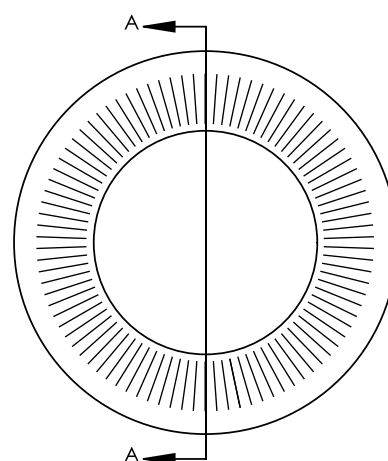
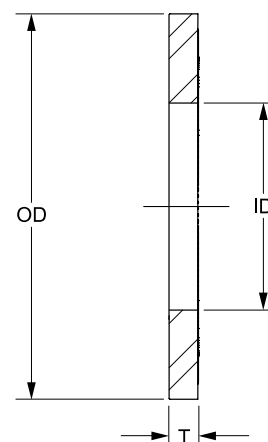
Art. no.	Size	ID	OD	T
ZRW010-M16-SHCS	5/8"	.65"	1.12"	.12"
ZRW-012-SHCS	3/4"	.78"	1.43"	.13"
ZRW-014-SHCS	7/8"	.91"	1.46"	.13"
ZRW-100-SHCS	1"	1.02"	1.87"	.15"
ZRW-102-SHCS	1-1/8"	1.15"	2.06"	.15"
ZRW-104-SHCS	1-1/4"	1.27"	2.31"	.19"
ZRW-106-SHCS	1-3/8"	1.40"	2.49"	.19"
ZRW-108-SHCS	1-1/2"	1.52"	2.74"	.19"
ZRW-112-SHCS	1-3/4"	1.77"	2.93"	.19"



HYTORC Back-up washer

Imperiaal

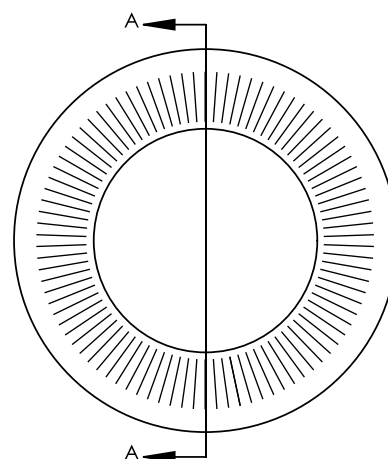
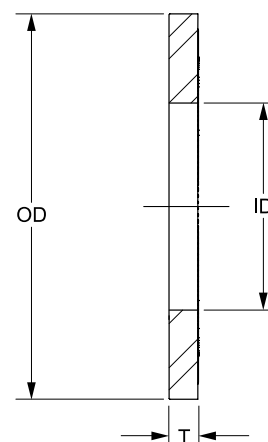
Art. no.	Maat	I.D.	O.D.	F	Gewicht
ZBW008	1/2"	13,6 mm	25,5 mm	3,3 mm	-
ZBW009	9/16"	15,2 mm	27,6 mm	3,3 mm	-
ZBW010	5/8"	16,8 mm	31,2 mm	3,3 mm	13,3 gr
ZBW012	3/4"	20,8 mm	36,8 mm	4,1 mm	21,6 gr
ZBW014	7/8"	24,0 mm	41,9 mm	4,3 mm	29,0 gr
ZBW100	1"	27,1 mm	47,5 mm	4,3 mm	36,6 gr
ZBW102-M30	1-1/8" (M30)	31,8 mm	53,1 mm	5,1 mm	54,0 gr
ZBW104-M33	1-1/4" (M33)	34,9 mm	58,6 mm	5,1 mm	67,5 gr
ZBW106-M36	1-3/8" (M36)	38,4 mm	64,2 mm	5,1 mm	80,1 gr
ZBW108-M39	1-1/2" (M39)	41,4 mm	69,6 mm	5,1 mm	93,5 gr
ZBW110-M42	1-5/8" (M42)	45,1 mm	75,2 mm	6,5 mm	130,2 gr
ZBW112-M45	1-3/4" (M45)	48,2 mm	80,6 mm	6,5 mm	155,0 gr
ZBW114-M48	1-7/8" (M48)	51,1 mm	86,2 mm	6,6 mm	177,0 gr
ZBW200-M52	2" (M52)	54,7 mm	91,6 mm	7,1 mm	201,2 gr
ZBW204-M56	2-1/4" (M56)	58,5 mm	104,6 mm	8,0 mm	327,3 gr
ZBW208-M64	2-1/2" (M64)	66,0 mm	114,3 mm	9,1 mm	417,5 gr
ZBW204-4	2-3/4"	71,9 mm	125,0 mm	9,1 mm	512,0 gr
ZBW204-3	3"	78,2 mm	133,4 mm	11,2 mm	681,0 gr



HYTORC Back-up washer

Metriek

Art. no.	Maat	ID	OD	F	Gewicht
ZBW-M14	M14	15,6 mm	25,5 mm	3,3 mm	-
ZBW-M16	M16	17,6 mm	27,6 mm	3,3 mm	-
ZBW-M18	M18	20,1 mm	31,2 mm	3,3 mm	-
ZBW-M20	M20	22,1 mm	34,6 mm	3,6 mm	14,5 gr
ZBW-M22	M22	24,1 mm	36,8 mm	3,3 mm	18,2 gr
ZBW-M24	M24	26,1 mm	41,9 mm	3,3 mm	25,6 gr
ZBW-M27	M27	30,2 mm	47,5 mm	3,3 mm	32,6 gr
ZBW102-M30	M30 (1-1/8")	31,8 mm	53,1 mm	5,1 mm	54,0 gr
ZBW104-M33	M33 (1-1/4")	34,9 mm	58,6 mm	5,1 mm	67,5 gr
ZBW106-M36	M36 (1-3/8")	38,4 mm	64,2 mm	5,1 mm	80,1 gr
ZBW108-M39	M39 (1-1/2")	41,4 mm	69,6 mm	5,1 mm	93,5 gr
ZBW110-M42	M42 (1-5/8")	45,1 mm	75,2 mm	6,5 mm	130,2 gr
ZBW112-M45	M45 (1-3/4")	48,2 mm	80,6 mm	6,5 mm	155,0 gr
ZBW114-M48	M48 (1-7/8")	51,1 mm	86,2 mm	6,6 mm	177,0 gr
ZBW200-M52	M52 (2")	54,7 mm	91,6 mm	7,1 mm	201,2 gr
ZBW204-M56	M56 (2-1/4")	58,5 mm	104,6 mm	8,0 mm	327,3 gr
ZBW-M60	M60	62,0 mm	104,6 mm	8,0 mm	305,7 gr
ZBW208-M64	M64 (2-1/2")	66,0 mm	114,3 mm	9,1 mm	417,5 gr
ZBW-M68	M68	70,1 mm	114,3 mm	9,1 mm	396,0 gr
ZBW-M72	M72	74,0 mm	125,0 mm	9,1 mm	497,5 gr
ZBW-M76	M76	78,0 mm	125,0 mm	9,1 mm	468,0 gr
ZBW-M80	M80	82,0 mm	133,4 mm	11,2 mm	645,0 gr

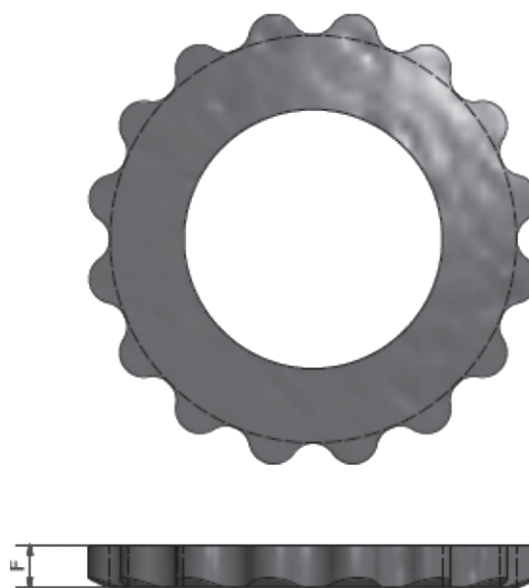
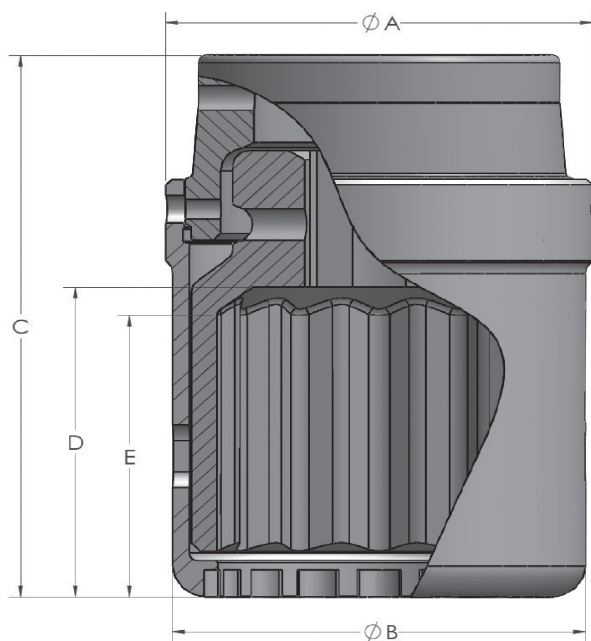


HYTORC Washer driver

Compatibel met de ICE, Avanti, jGun Single Speed, jGun Gual Speed, jGun DIGITAL, Lithium Gun en LION Gun.

Metriek en imperiaal

Art. no.	SQ	Thread size	SW	Thread size	SW	ØA	ØB	C	D	E	F
DZAKM20-30MX	3/4"	-	-	M20	30 mm	58,5 mm	48,5 mm	74,1 mm	31,5 mm	19,5 mm	3,3 mm
DZAK012-104X		3/4"	1-1/4"	M22	32 mm	58,5 mm	51,8 mm	82,1 mm	46,3 mm	44,3 mm	3,3 mm
DZAK014-107X		7/8"	1-7/16"	M24	36 mm	58,5 mm	56 mm	84,4 mm	44,8 mm	33,8 mm	4,1 mm
DZAK100-110X		1"	1-5/8"	M27	41 mm	63,5 mm	61 mm	89,6 mm	53,6 mm	48 mm	4,1 mm
DZAK102-113X		1-1/8"	1-13/16"	M30	46 mm	71,3 mm	68,7 mm	96,2 mm	61,1 mm	53,5 mm	4,8 mm
DZAK104-200X		1-1/4"	2"	M33	50 mm	78,5 mm	76 mm	95,9 mm	60,2 mm	50,6 mm	4,8 mm
DZAK106-203X		1-3/8"	2-3/16"	M36	55 mm	84,5 mm	82 mm	109,3 mm	73,5 mm	62 mm	4,8 mm
DZAK108-206X		1-1/2"	2-3/8"	M39	60 mm	90 mm	87,2 mm	107,4 mm	71,6 mm	57,3 mm	4,8 mm
DZAL100-110X	1"	1"	1-5/8"	M27	41 mm	63,5 mm	63,5 mm	95 mm	47,7 mm	42,1 mm	4,1 mm
DZAL102-113X		1-1/8"	1-13/16"	M30	46 mm	71,2 mm	69,9 mm	104,7 mm	58,7 mm	55,6 mm	4,8 mm
DZAL104-200X		1-1/4"	2"	M33	50 mm	78,5 mm	76 mm	117,5 mm	70,5 mm	64,1 mm	4,8 mm
DZAL106-203X		1-3/8"	2-3/16"	M36	55 mm	85 mm	82 mm	106,9 mm	64,9 mm	56,6 mm	4,8 mm
DZAL108-206X		1-1/2"	2-3/8"	M39	60 mm	89,5 mm	87,3 mm	124 mm	76,7 mm	66,6 mm	4,8 mm
DZAL110-209X		1-5/8"	2-9/16"	M42	65 mm	99,3 mm	94 mm	132,5 mm	85,4 mm	73,4 mm	6,4 mm
DZAL112-212X		1-3/4"	2-3/4"	M45	70 mm	103,7 mm	99,1 mm	133,7 mm	86,7 mm	72,8 mm	6,4 mm
DZAL114-215X		1-7/8"	2-15/16"	M48	75 mm	112,9 mm	107 mm	137,4 mm	90,7 mm	74,9 mm	6,4 mm
DZAL200-302X		2"	3-1/8"	M52	80 mm	116,2 mm	113 mm	143,8 mm	85,4 mm	74 mm	6,4 mm

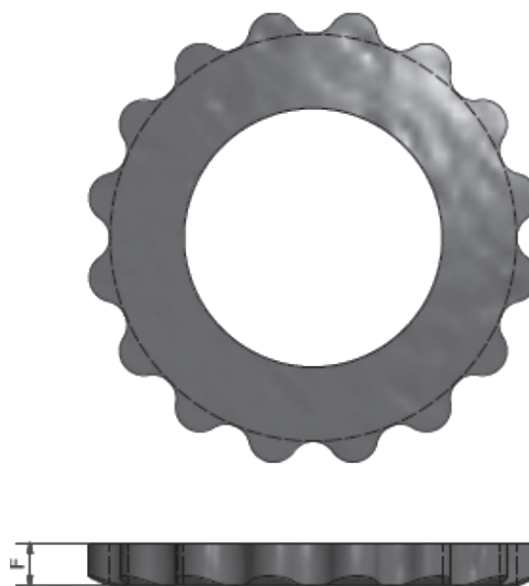
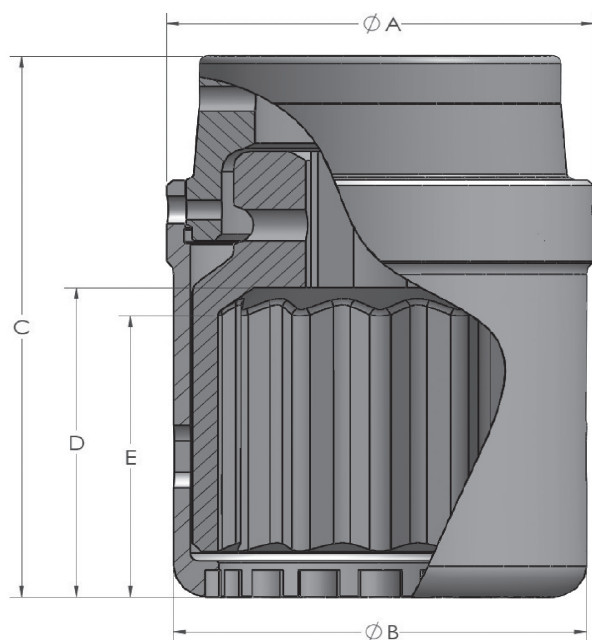


HYTORC Washer driver

Compatibel met de ICE, Avanti, jGun Single Speed, jGun Gual Speed, jGun DIGITAL, Lithium Gun en LION Gun.

Metriek en imperiaal (vervolg)

Art. no.	SQ	Thread size	SW	Thread size	SW	ØA	ØB	C	D	E	F
DZAM-108-206X	1½" Type 5	1-1/2"	2-3/8"	M39	60 mm	105,2 mm	88,9 mm	132,7 mm	63,5 mm	56,8 mm	4,8 mm
DZAM-110-209X		1-5/8"	2-9/16"	M42	65 mm	101,6 mm	101,6 mm	136 mm	71,8 mm	66,6 mm	6,4 mm
DZAM-112-212X		1-3/4"	2-3/4"	M45	70 mm	107,1 mm	107,1 mm	135,3 mm	70,3 mm	64,8 mm	6,4 mm
DZAM-114-215X		1-7/8"	2-15/16"	M48	75 mm	112 mm	112 mm	138,9 mm	73,9 mm	66,3 mm	6,4 mm
DZAM-200-302X		2"	3-1/8"	M52	80 mm	121 mm	121 mm	146,1 mm	81,2 mm	71,6 mm	6,4 mm
DZAM-204-308X		2-1/4"	3-1/2"	M56	85 mm	133 mm	133 mm	151,1 mm	86,2 mm	67,8 mm	8,2 mm
DZAM-208-314X		2-1/2"	3-7/8"	M64	95 mm	144 mm	144 mm	164,7 mm	99,8 mm	82,3 mm	9,1 mm
DZAM-212-402X		2-3/4"	4-1/4"	M72	105 mm	155 mm	155 mm	172,4 mm	107,4 mm	81 mm	9,1 mm
DZAM-300-410X		3"	4-5/8"	M80	115 mm	166 mm	166 mm	183,6 mm	118,6 mm	97,3 mm	11,2 mm
DZAN-204-308X		1½" Type 8	2-1/4"	3-1/2"	M56	85 mm	133 mm	133 mm	153 mm	87,4 mm	69,1 mm
DZAN-208-314X	2-1/2"		3-7/8"	M64	95 mm	144 mm	144 mm	164,7 mm	99,9 mm	82,7 mm	9,1 mm
DZAN-212-402X	2-3/4"		4-1/4"	M72	105 mm	155 mm	155 mm	171,3 mm	106,6 mm	80,1 mm	9,1 mm
DZAN-300-410X	3"		4-5/8"	M80	115 mm	166 mm	166 mm	183,6 mm	118,9 mm	97,6 mm	11,2 mm
DZAP-204-308X	1½" Type 10	2-1/4"	3-1/2"	M56	85 mm	133 mm	133 mm	155 mm	86,9 mm	68,6 mm	8,2 mm
DZAP-208-314X		2-1/2"	3-7/8"	M64	95 mm	144 mm	144 mm	169,8 mm	101,6 mm	84,3 mm	9,1 mm
DZAP-212-402X		2-3/4"	4-1/4"	M72	105 mm	155 mm	155 mm	177,5 mm	109,2 mm	82,8 mm	9,1 mm
DZAP-300-410X		3"	4-5/8"	M80	115 mm	166 mm	166 mm	188,7 mm	120,5 mm	99,1 mm	11,2 mm



HYTORC Washer driver SHCS

Compatibel met de ICE, Avanti, jGun Single Speed, jGun Gual Speed, jGun DIGITAL, Lithium Gun en LION Gun.

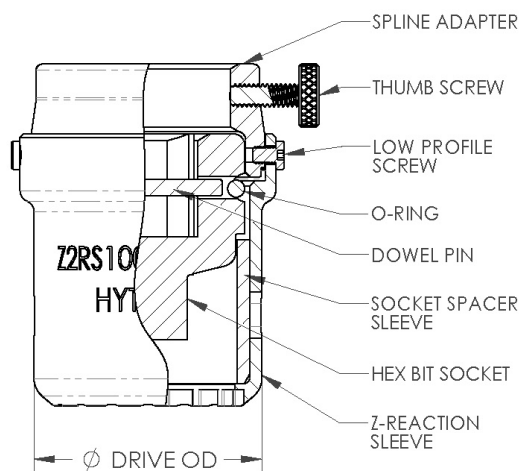
Metriek en imperial

DZ###-SHCS-###X

TOOL MODEL CODE		TOOL SIZE CODE		Z-REACTION SLEEVE SIZE CODE		REFERENCE INFORMATION						
MODEL	CODE	TOOL SIZE	CODE	(BASED ON SHCS STUD SIZE)		AF MALE HEX BIT SIZE		DRIVE OD (PER TOOL SQ. DR. SIZE)				
				SIZE CODE	STUD SIZE		INCH	MM	3/4"	1"	1-1/2"	
AVANTI	A	0.7	Y	MODEL CODE A	5/8	N/A	1/2	N/A	1.39	N/A	N/A	
ICE	A	1 ^b	K									INCH
JGUN	A	3 ^c	L		010	3/4	N/A	5/8	N/A	1.69	1.69	N/A
FLASH	A	5	M		012	7/8	N/A	3/4	N/A	1.91	1.91	N/A
LITHIUM ^a	A	8	N		014	1	N/A	3/4	N/A	2.21	2.21	N/A
BTM-0250	B	10	P		100	1 1/8	N/A	7/8	N/A	2.40	2.40	2.50
Z-GUN	Z	0.25	E	102	1 1/4	N/A	1	N/A	2.71	2.75	2.75	
		0.5	R	104	1 3/8	N/A	1	N/A	2.99	2.99	2.99	
		0.75	V	106	1 1/2	N/A	1	N/A	3.23	3.23	3.50	
		1	V	108	1 3/4	N/A	1 1/4	N/A	3.42	3.44	3.50	
		2	W	112	N/A	M16	N/A	14	1.39	N/A	N/A	
		3	W	M16	N/A	M18	N/A	14	1.54	N/A	N/A	
				M18	N/A	M20	N/A	17	1.69	1.69	N/A	
				M20	N/A	M22	N/A	17	1.91	1.91	N/A	
				M22	N/A	M24	N/A	19	2.04	2.04	N/A	
				M24	N/A	M27	N/A	19	2.21	2.21	N/A	
				M27	N/A	M30	N/A	22	2.40	2.40	2.50	
				M30	N/A	M33	N/A	24	2.71	2.75	2.75	
				M33	N/A	M36	N/A	27	2.99	2.99	2.99	
				M36	N/A	M42	N/A	32	3.42	3.44	3.50	
				M42	N/A		N/A					

FOOTNOTES:

- (a) FOR LITHIUM BTM-0250 USE CODE "B"
- (b) FOR TOOL SIZES - J1, JP5 & JP25
- (c) FOR TOOL SIZES - J2, J3, FG2, FG3, BTM-2000 & BTM-3000



DRIVER ASSEMBLY
 CROSS SECTION
 (DESIGNS MAY VARY)

Reactieplaat

Compatibel met alle typen Stealth

Artikelnummer	Type Stealth	Diameter bout	Dikte reactieplaat G
ST02-RP***-M**	STEALTH 2	M18 – M39	7,9 mm
ST02-RP***-M**	STEALTH 2	M42 – M45	9,5 mm
ST04-RP***-M**	STEALTH 4	M30 – M52	9,5 mm
ST08-RP***-M**	STEALTH 8	M39 – M52	11,1 mm
ST08-RP***-M**	STEALTH 8	M56 – M68	12,1 mm
ST14-RP***-M52	STEALTH 14	M52	11,1 mm
ST14RP***-M**	STEALTH 14	M56 – M68	12,6 mm
ST14RP***-M**	STEALTH 14	M72 – M76	14,2 mm
ST14RP***-M80	STEALTH 14	M80	15,6 mm

