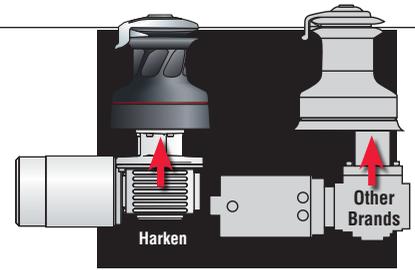


# Electric & Hydraulic Motors

Specify power type, material, voltage, and motor configuration when ordering. See part number explanation.

About Radial winches: see feature pages at beginning of this section.



Harken electric and hydraulic motors attach to the central drive shaft and drive through the winch gears for a two-speed mechanical advantage—the low-power first gear for fast trimming, the higher-power second gear for fine-tuning loaded sheets. This results in reduced battery drain and a more efficient motor on the electric version. The energy-efficient hydraulic version is also smaller, reducing weight and cost.

## Dimensions

Part No.	E		F		G		L		N		A		Weight C		BBB/CCC	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg	lb	kg	lb	kg
<b>Electric</b>																
35.2STEH	1 3/4	43	6 1/8	155	8 7/8	227					29.3	13.3	32	14.5	33.5	15.2
40.2STEH	1 3/4	43	6 1/8	155	8 7/8	227					29.7	13.5	33.2	15.1	35	15.9
46.2STEH	1 3/4	43	6 1/8	155	8 7/8	227					32.8	14.9	38.5	17.5	41	18.6
46.2STEV							15 3/8	391	6 1/8	157	36.9	16.7	42.6	19.3	45	20.4
50.2STEH	2 3/4	69	7 1/8	181	9 5/8	244					37.1	16.8	44.2	20	46.7	21.2
50.2STEV							15 3/8	391	6 1/8	157	38.6	17.5	45.7	20.7	48.3	21.9
60.2STEH	2 3/4	69	7 1/8	181	9 5/8	244					46.4	21	54.5	24.7	57.8	26.2
60.2STEV							15 3/8	391	6 1/8	157	47.9	21.7	56.1	25.4	59.3	26.9
60.3STEH	2 3/4	69	7 1/8	181	9 5/8	244					49.7	22.5	57.8	26.2	61	27.7
60.3STEV							15 3/8	391	6 1/8	157	51.2	23.2	59.4	26.9	62.6	28.4
70.2STEH	2 3/4	69	7 1/8	181	9 5/8	244					48.8	22.1	57.2	25.9	60.6	27.5
70.2STEV							15 3/8	391	6 1/8	157	50.3	22.8	58.7	26.6	62.2	28.2
70.3STEH	2 3/4	69	7 1/8	181	9 5/8	244					52.1	23.6	60.5	27.4	63.9	29
70.3STEV							15 3/8	391	6 1/8	157	53.6	24.3	62	28.1	65.5	29.7
80.2STEH	3 3/16	81	8 11/16	221	10 11/16	272					70.6	32	87.2	39.5		
80.2STEV							16 13/16	427	6 3/4	172	72.2	32.7	88.7	40.2		
80.3STEH	3 3/16	81	8 11/16	221	10 11/16	272					74	33.5	90.5	41		
80.3STEV							16 13/16	427	6 3/4	172	75.5	34.2	92.1	41.7		
<b>Hydraulic</b>																
46.2STH							9 1/4	234	5 1/8	130	28	12.7	33.8	15.3	36.2	16.4
50.2STH							9 1/4	234	5 1/8	130	29.8	13.5	36.9	16.7	39.5	17.9
60.2STH							9 1/4	234	5 1/8	130	39.1	17.7	47.2	21.4	50.5	22.9
60.3STH							9 1/4	234	5 1/8	130	42.4	19.2	50.6	22.9	53.8	24.4
70.2STH							9 1/4	234	5 1/8	130	41.5	18.8	49.9	22.6	53.4	24.2
70.3STH							9 1/4	234	5 1/8	130	44.8	20.3	53.2	24.1	56.7	25.7
80.2STH							9 7/8	250	5 1/8	130	66.4	30.1	83	37.6		
80.3STH							9 7/8	250	5 1/8	130	69.8	31.6	86.3	39.1		

Winch size	Electric motor configuration		Current voltage		Power in watts	
	Horizontal (STEH)	Vertical (STEV)	12V	24V	12V	24V
35.2 - 40.2	✓	—	✓	✓	700	900
46.2	✓	✓	✓	✓	700	900
50.2	✓	✓	✓	✓	1500	2000
60.2 - 60.3	✓	✓	✓	✓	1500	2000
70.2 - 70.3	✓	✓	✓	✓	1500	2000
80.2 - 80.3	✓	✓	✓	✓	1500	2000

## Electric Wire Gauges

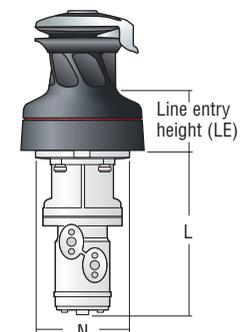
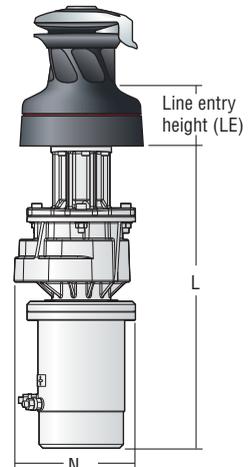
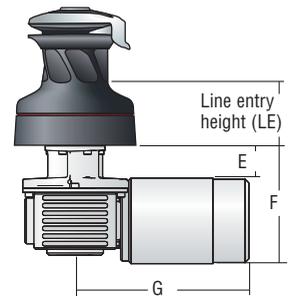
Winch size	Current voltage	Total distance between winch and battery							
		Under 16.4' AWG	Under 5 m 32.8' AWG	16.4 - 32.8' 5 m 50 mm <sup>2</sup>	5 - 10 m 32.8' 50 mm <sup>2</sup>	10 - 15 m 49.2' 70 mm <sup>2</sup>	15 - 20 m 49.2' 70 mm <sup>2</sup>	15 - 20 m 65.6' 95 mm <sup>2</sup>	15 - 20 m 65.6' 95 mm <sup>2</sup>
35.2 - 40.2	12V	2	32	0	50	00	70	000	95
35.2 - 40.2	24V	5	16	3	25	2	35	0	50
46.2	12V	2	32	0	50	00	70	000	95
46.2	24V	5	16	3	25	2	35	0	50
50.2	12V	2	32	0	50	00	70	000	95
50.2	24V	5	16	3	25	2	35	0	50
60.2 - 60.3	12V	2	32	0	50	00	70	000	95
60.2 - 60.3	24V	5	16	3	25	2	35	0	50
70.2 - 70.3	12V	2	32	0	50	00	70	000	95
70.2 - 70.3	24V	5	16	3	25	2	35	0	50
80.2 - 80.3	12V	2	32	0	50	00	70	000	95
80.2 - 80.3	24V	5	16	3	25	2	35	0	50

## Part Numbers

Specify power type, material, voltage, and motor configuration when ordering. Refer to manual self-tailing Radial winch pages for drum and power ratio specifications.

**46.2STEC12H**

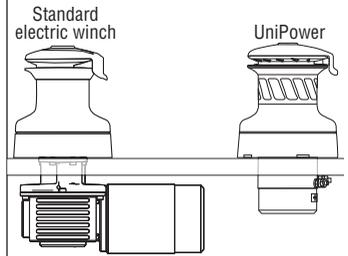
- Winch size
- Number of speeds
- Self-tailing
- Power type  
E = Electric  
H = Hydraulic
- Material code  
A = Aluminum  
C = Chrome  
CW = Chrome/white  
CCC = All-chrome  
BBB = Bronze
- Voltage  
12 = 12V  
24 = 24V
- Motor configuration  
Specify electric; hydraulic available in vertical only.  
H = Horizontal  
V = Vertical



# UniPower Winches

The UniPower is a single-speed winch that combines the advantages of a low-profile manual winch with the power of a 12- or 24-volt, low-amp-draw motor. What makes it unique is that the motor is partially imbedded inside the drum, so that it extends only 105 mm (4 1/8") below the winch base—a critical feature for small boats where space under the cabintop is limited.

About Radial winches: see feature pages at beginning of this section.



Low-profile electric motor saves headspace.



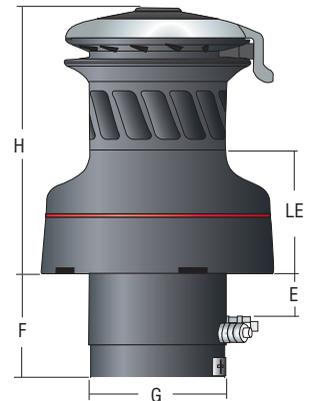
Eckernförde, Saare 38, 11.40 m, Karl-Johan Stråhlmann, Saare Yachts  
© Saare Yachts



900UPW



Works with handle if power is unavailable.



## Dimensions

Part No.	Line entry height (LE)		E		F		G	
	in	mm	in	mm	in	mm	in	mm
900UPWA/C/CW/CCC/BBB	3 15/16	100	1 3/8	35	4 1/8	105	5 1/2	140

Part No.	Drum		Base		Height (H)		Weight		Line Ø		Fastener circle		Fasteners (SH or HH)		Max pull			
	in	mm	in	mm	in	mm	lb	kg	in	mm	in	mm	in	mm	lb	kg		
900UPWA	4 3/8	110	7 1/2	190	8 1/2	215	26.5	12	5/16	8	9/16	14	6 5/16	160	5 x 5/16	5 x M8	1984	900
900UPWC	4 3/8	110	7 1/2	190	8 1/2	215	32	14.5	5/16	8	9/16	14	6 5/16	160	5 x 5/16	5 x M8	1984	900
900UPWCW	4 3/8	110	7 1/2	190	8 1/2	215	32	14.5	5/16	8	9/16	14	6 5/16	160	5 x 5/16	5 x M8	1984	900
900UPWCCC	4 3/8	110	7 1/2	190	8 1/2	215	34.6	15.7	5/16	8	9/16	14	6 5/16	160	5 x 5/16	5 x M8	1984	900
900UPWBBB	4 3/8	110	7 1/2	190	8 1/2	215	34.6	15.7	5/16	8	9/16	14	6 5/16	160	5 x 5/16	5 x M8	1984	900

Specify voltage when ordering. Harken recommends the single function digital switch DSSBK4 and circuit breaker HCP1717. Sold separately.

# Rewind Electric Winches

The Rewind Radial electric winch is the latest in Harken's "easy sailing" solutions for cruisers, and the first winch of its kind in the marine market. Activated remotely by twin in/out buttons, the Rewind safely eases and trims highly-loaded sails in both directions without ever taking the line out of the self-tailer.

Like all Harken electric winches, the Rewind operates like a normal 2-speed electric winch. A simple flip of the red knob on the winch base turns on the rewind feature. A spring-loaded arm of investment-cast stainless steel funnels and keeps line captive as it feeds in and out of the self-tailer as the sail is adjusted with fingertip control.

Available in 12- and 24-volts.

About Radial winches: see feature pages at beginning of this section.



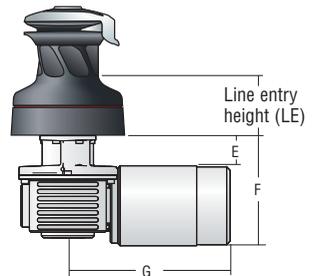
A Harken locking handle inserted into an unloaded winch automatically disconnects the motor gear for manual operation.



Activated remotely by twin in/out buttons, the Rewind winch safely eases and trims highly-loaded sails in both directions without ever taking the line out of the self-tailer.



A simple flip of the red knob on the winch base turns on the rewind feature.



Part No.	Line entry height (LE)		E		F		G	
	in	mm	in	mm	in	mm	in	mm
40RWA/C/CW/CCC/BBB	3 1/4	82	1 3/4	43	6 1/8	155	11	280
46RWA/C/CW/CCC/BBB	3 9/16	90	1 3/4	43	6 1/8	155	11	280
60RWA/C/CW/CCC/BBB	4 9/16	116	2 3/4	69	7 1/8	181	11	280

Part No.	Ø Drum		Ø Base		Height		Weight		Line Ø				Fastener circle		Fasteners (SH or HH)		Gear ratio		Power ratio	
	in	mm	in	mm	in	mm	lb	kg	in	mm	in	mm	in	mm	in	mm	1	2	1	2
40RWA	3 1/8	80	6 3/16	157	6 7/8	175	32.2	14.6	5/16	8	1/2	12	4 7/8	123	5 x 1/4	5 x 6	2.13	6.28	13.50	39.90
40RWC/CW	3 1/8	80	6 3/16	157	6 7/8	175	35.7	16.2	5/16	8	1/2	12	4 7/8	123	5 x 1/4	5 x 6	2.13	6.28	13.50	39.90
40RWCCC/BBB	3 1/8	80	6 3/16	157	6 7/8	175	37.5	17	5/16	8	1/2	12	4 7/8	123	5 x 1/4	5 x 6	2.13	6.28	13.50	39.90
46RWA	3 7/8	100	7 1/4	184	8	203	35.3	16	3/8	10	9/16	14	5 7/8	150	5 x 5/16	5 x 8	2.30	9.17	11.70	46.50
46RWC/CW	3 7/8	100	7 1/4	184	8	203	41	18.6	3/8	10	9/16	14	5 7/8	150	5 x 5/16	5 x 8	2.30	9.17	11.70	46.50
46RWCCC/BBB	3 7/8	100	7 1/4	184	8	203	43.4	19.7	3/8	10	9/16	14	5 7/8	150	5 x 5/16	5 x 8	2.30	9.17	11.70	46.50
60RWA	4 3/4	120	9 5/16	236	9 11/16	246	48.7	22.1	9/16	14	5/8	16	8	204	6 x 5/16	6 x 8	4.80	14.40	20.30	61.00
60RWC/CW	4 3/4	120	9 5/16	236	9 11/16	246	56.9	25.8	9/16	14	5/8	16	8	204	6 x 5/16	6 x 8	4.80	14.40	20.30	61.00
60RWCCC/BBB	4 3/4	120	9 5/16	236	9 11/16	246	60.2	27.3	9/16	14	5/8	16	8	204	6 x 5/16	6 x 8	4.80	14.40	20.30	61.00



# Electric and Hydraulic Performa Winches

Electric and hydraulic Performa winches let you trim any size sail with the push of a button.

Specify power type, voltage, and motor configuration when ordering. See part number explanation.

About Performa winches: see feature pages at beginning of this section.

## Part Numbers

Specify power type, voltage, and motor configuration when ordering

**46.2STEP12HLM**

Winch size

Number of speeds

Self-tailing

Power type

E = Electric H = Hydraulic

Performa

P = Performa winch line

Voltage

12 = 12V 24 = 24V

Motor configuration

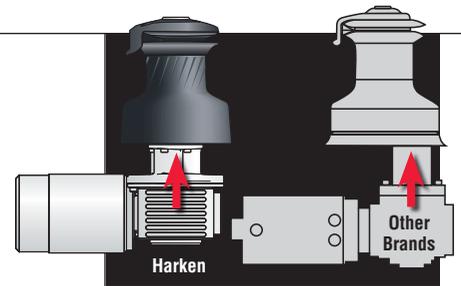
Specify for electric; hydraulic available in vertical only.

H = Horizontal V = Vertical

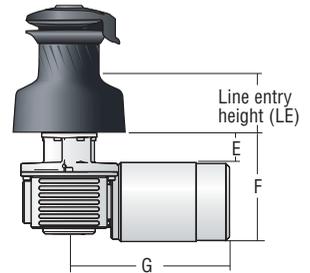
Left-mount option

Available in electric only. Additional letter code for left-mount option only; standard mounting part number ends with motor configuration.

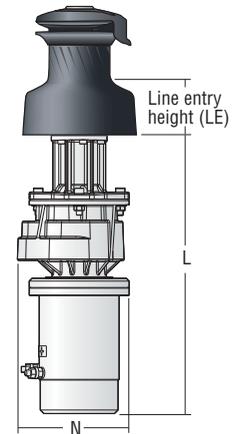
LM = Left-mount



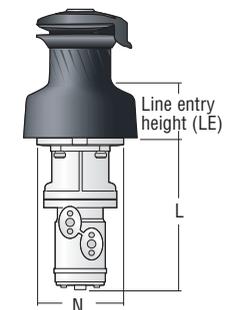
Harken electric and hydraulic motors attach to the central drive shaft and drive through the winch gears for a 2-speed mechanical advantage—the low-power first gear for fast trimming, the higher-power second gear for fine-tuning loaded sheets. This results in reduced battery drain and a more efficient motor on the electric version. The energy-efficient hydraulic version is also smaller, reducing weight and cost.



**ELECTRIC HORIZONTAL**



**ELECTRIC VERTICAL**



**HYDRAULIC**

## Dimensions

Part No.	Racing disconnect rod*	E		F		G		L		N		Weight with motor		
		in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg	
<b>Electric</b>														
40.2STEPH	B40PDR	1 3/4	43	6 1/8	155	8 7/8	227						29.7	13.5
46.2STEPH	B46PDR	1 3/4	43	6 1/8	155	8 7/8	227						32.8	14.9
46.2STEPV	B46PDR							15 3/8	391	6 1/8	157		36.9	16.7
50.2STEPH	B50PDR	2 3/4	69	7 1/8	181	9 5/8	244						37.1	16.8
50.2STEPV	B50PDR							15 3/8	391	6 1/8	157		38.6	17.5
60.2STEPH	B60PDR	2 3/4	69	7 1/8	181	9 5/8	244						46.4	21
60.2STEPV	B60PDR							15 3/8	391	6 1/8	157		47.9	21.7
60.3STEPH	B60.3PDR	2 3/4	69	7 1/8	181	9 5/8	244						49.7	22.5
60.3STEPV	B60.3PDR							15 3/8	391	6 1/8	157		51.2	23.2
70.2STEPH	B70PDR	2 3/4	69	7 1/8	181	9 5/8	244						48.8	22.1
70.2STEPV	B70PDR							15 3/8	391	6 1/8	157		50.3	22.8
70.3STEPH	B70.3PDR	2 3/4	69	7 1/8	181	9 5/8	244						52.1	23.6
70.3STEPV	B70.3PDR							15 3/8	391	6 1/8	157		53.6	24.3
80.2STEPH	B80PDR	3 3/16	81	8 11/16	221	10 11/16	272						70.6	32
80.2STEPV	B80PDR							16 13/16	427	6 3/4	172		72.2	32.7
80.3STEPH	B80.3PDR	3 3/16	81	8 11/16	221	10 11/16	272						74	33.5
80.3STEPV	B80.3PDR							16 13/16	427	6 3/4	172		75.5	34.2
<b>Hydraulic</b>														
46.2STHP	B46PDR							9 1/4	234	5 1/8	130		28	12.7
50.2STHP	B50PDR							9 1/4	234	5 1/8	130		29.8	13.5
60.2STHP	B60PDR							9 1/4	234	5 1/8	130		39.1	17.7
60.3STHP	B60.3PDR							9 1/4	234	5 1/8	130		42.4	19.2
70.2STHP	B70PDR							9 1/4	234	5 1/8	130		41.5	18.8
70.3STHP	B70.3PDR							9 1/4	234	5 1/8	130		44.8	20.3
80.2STHP	B80PDR							9 7/8	250	5 1/8	130		80.9	36.7
80.3STHP	B80.3PDR							9 7/8	250	5 1/8	130		84.2	38.2

\*When racing, insert a racing disconnect rod to operate the winch manually. Performa disconnect rods are also available for Radial winches.

# Electric Components

Battery voltage and winch size determine which components you should use. For winches size B980 and above, contact Harken for appropriate components. All components sold separately.

Each electric winch requires one control box, one circuit breaker, and two analog switches or one Digital System Switch. All new electric Radial, Performa, and captive winches are supplied with the appropriate dual-function control box. For replacement or retrofit control boxes, contact Harken.

Hydraulic winches require two analog switches or one Digital System Switch.

## Analog Switches

Harken offers simple, waterproof switches for electric and hydraulic winches. Order two switches for each winch.

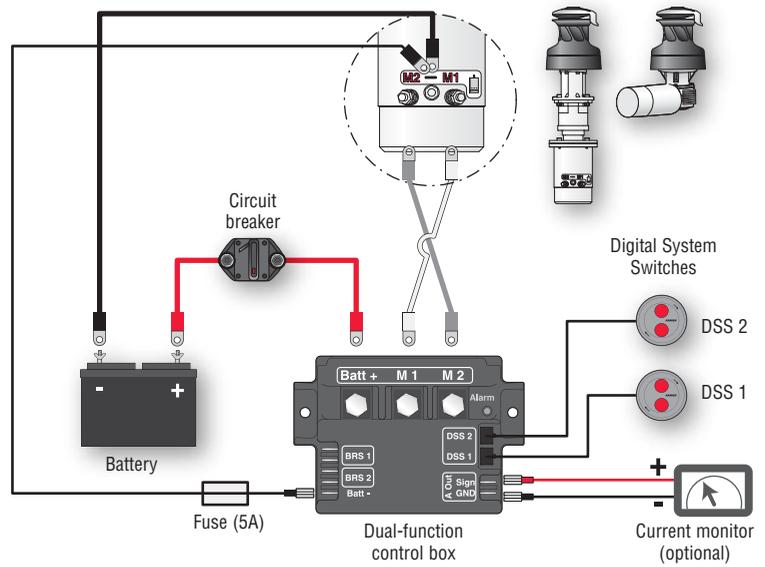
## High-Amperage Circuit Breakers

Harken offers four panel-mount, high-amperage circuit breakers. They are compact, waterproof, weather-resistant, and ignition-protected. Circuit breakers are available for 12- or 24-volt DC systems.

## Dual-Function Control Boxes

This labor-saving control box with built-in load controller combines two products into one, reducing wiring and connection points by almost half, greatly simplifying installation of Harken electric winches. Supports Digital System Switch or analog switches. A mix of switches is not supported.

System wiring may be different depending on winch size and installation. Please refer to the user manual for additional connection information.



CIRCUIT BREAKERS



DUAL-FUNCTION CONTROL BOXES



ANALOG SWITCHES

## Circuit Breakers

Part No.	Volts	Amp rating	Use with winch
HCP1717	12/24	80	12 volt: Radial/Performa: 40.2STE & 46.2STE, 40-46RW; Classic: B40.2STE; 24 volt: Radial/Performa: 40.2STE to 80.3STE, 40-46-60RW, 900UPW; Classic: B44.2STE to B980.2STE; CLR600; FlatWinder: FW250, FW500
HCP1718	12	100	Radial: 900UPW; Classic: B44.2STE to B60.2STE
HCP1719	12	150	Classic: B70.2STE to B980.2STE; FlatWinder: FW250, FW500; CLR1200
HCP1720	12	135	12 volt: Radial/Performa: 46.2STE12V, 50.2STE to 80.2STE, 60RW; CLR600; 24 volt: CLR1200

## Analog Switches

Part No.	Description	Length		Width		Height		Weight	
		in	mm	in	mm	in	mm	oz	g
BRS102/S	Remote switch w/guard	2 11/16	68	2 11/16	68	13/16	21	10.4	295
BRS102/P	Remote switch w/guard	2 11/16	68	2 11/16	68	13/16	21	4.8	135
BRS104/P	Remote switch w/guard	3 3/8	85	3	76	3/4	19	3.4	95

# Digital System Switches

Harken Digital System Switches in dual and single-function models set the standard for the reliable operation of electrically-powered yacht systems.

To accomplish this, safeguards have been built into the systems.

- The waterproof control button translates electrical information into a binary code that won't allow the system to start without the signals being verified by the decoder. An analog system sends continuous electrical information directly to the powered device which means damage to the wiring or water ingress could result in unsafe activation.
- Watertight seals are never exposed, eliminating potential damage from sun and prolonged use.
- Underneath each control button, two command switches must work in unison before a signal is sent.

Harken Digital System Switches resist impact, wear, and abrasion. A unique adhesive mounting system is available where drilling is undesirable. The product is offered in black polyamide resin or stainless steel. Integrated lighting provides low-light visibility.

## Dual-function

Two-function control buttons housed in a single space-saving system—1st/2nd gear for winches, up/down for anchors, in/out for furling.

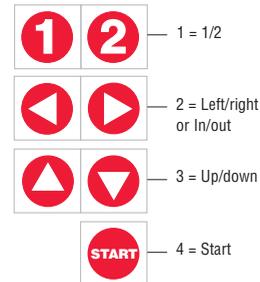
## Single-function

Single control button—Pairs with the Harken UniPower single-speed winch used by cruisers.



Active buttons:  
1st/2nd gear for winches, up/down for anchors, in/out for furling.

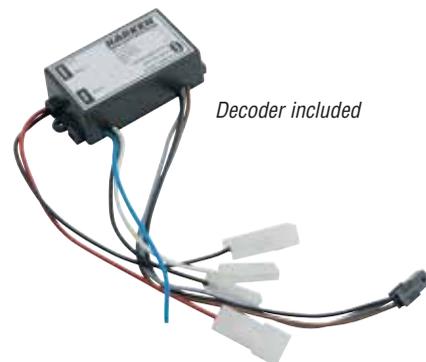
Button symbol      Part No. Ending



DUAL-FUNCTION



SINGLE-FUNCTION



Part No.	Description	Ø		Height		Weight	
		in	mm	in	mm	oz	g
<b>Dual-function</b>							
DSDBK1	Dual function digital switch/1-2	3 1/8	79.6	1	25.5	4.23	120
DSDSS1	Dual function digital switch/1-2	3 3/16	80.5	1 1/32	26	4.59	130
DSDBK2	Dual function digital switch/left-right or in-out	3 1/8	79.6	1	25.5	4.23	120
DSDSS2	Dual function digital switch/left-right or in-out	3 3/16	80.5	1 1/32	26	4.59	130
DSDBK3	Dual function digital switch/up-down	3 1/8	79.6	1	25.5	4.23	120
DSDSS3	Dual function digital switch/up-down	3 3/16	80.5	1 1/32	26	4.59	130
<b>Single-function</b>							
DSSBK4	Single function digital switch/black	3 1/8	79.6	1	25.5	4.23	120
DSSSS4	Single function digital switch/stainless steel	3 3/16	80.5	1 1/32	26	4.59	130