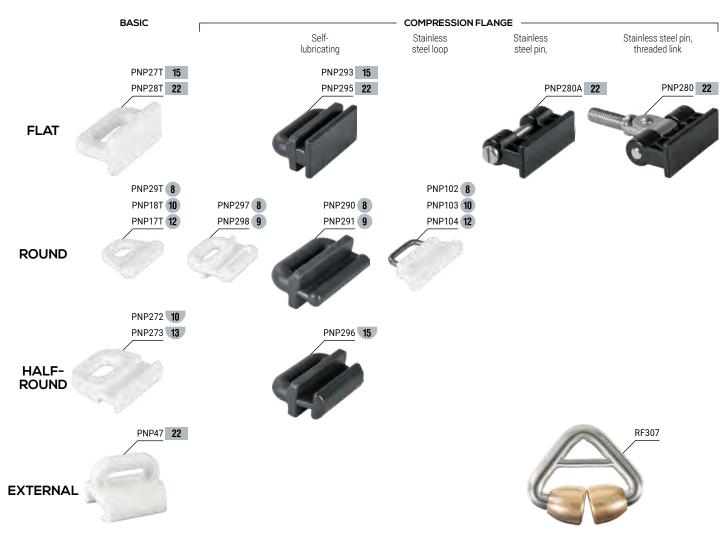
## SAILMAKER HARDWARE





Numbers in grey badges refer to nominal diameter (round & semi-round), or width (flat) in millimetres.

PRODUCT No.	DESCRIPTION	WEIGHT g	WEIGHT oz
Slides, Flat			
PNP27T	Sail slide, flat, 15.2mm (5/8") wide x 32mm (1 1/4") long, 20mm (3/4") webbing slot	4	0.1
PNP293*	Sail slide, flat, 15.3mm (5/8") wide, 45mm (1 3/4") long, 25mm (1") webbing slot, flange	12	0.4
PNP280	Sail slide, flat, 21.7mm (7/8") wide, 57mm (2 1/4") long, M10 link	98	3.5
PNP280A	Sail slide, flat, 21.7mm (7/8") wide, 64mm (2 1/2") long, 20mm (3/4") webbing slot, stainless steel pin	42	1.5
PNP295*	Sail slide, flat, 21.9 mm (7/8") wide, 45mm (1 3/4") long, 25mm (1") webbing slot, flange	14	0.5
PNP28T	Sail slide, flat, 23mm (7/8') wide x 42mm (1 5/8') long, 25mm (1') webbing slot	8	0.3
Slides, Round			
PNP290*	Sail slide, round, 7.4mm (5/16") diameter x 45mm (1 3/4") long, 25mm (1") webbing slot, flange	12	0.4
PNP297	Sail slide, round, 7.5mm (5/16") diameter x 28mm (1 1/8") long, 16mm (5/8") webbing slot, flange	4	0.1
PNP29T	Sail slide, round, 7.8mm (5/16") diameter x 32mm (1 1/4") long, 12mm (1/2") webbing slot, flange	2	0.1
PNP298	Sail slide, round, 8.9mm (3/8") diameter x 28mm (1 1/8") long, 16mm (5/8") webbing slot, flange	6	0.2
PNP102	Sail slide, round, 8.0mm (5/16") diameter x 42mm (1 5/8") long, 20mm (3/4") webbing slot, flange, stainless steel loop	8	0.3
PNP291*	Sail slide, round, 9.1mm (3/8") diameter x 45mm (1 3/4") long, 25mm (1") webbing slot, flange	12	0.4
PNP18T	Sail slide, round, 9.8mm (3/8") diameter x 40mm (1 9/16") long, 16mm (5/8") webbing slot, flange	4	0.1
PNP103	Sail slide, round, 9.8mm (3/8") diameter x 45mm (1 3/4") long, 20mm (3/4") webbing slot, flange, stainless steel loop	10	0.4
PNP17T	Sail slide, round, 11.7mm (1/2") diameter x 39mm (1 1/2") long, 16mm (5/8") webbing slot	4	0.1
PNP104	Sail slide, round, 12.3mm (1/2") diameter x 45mm (1 3/4") long, 20mm (3/4") webbing slot, flange, stainless steel pin	11	0.4
Slides, Half-Ro	und		
PNP272	Sail slide, half-round, 10.1mm (7/16") wide x 32mm (1 1/4") long, 16mm (5/8") webbing slot, flange, suits Seldèn profile	6	0.2
PNP273	Sail slide, half-round, 12.7mm (1/2") wide, 32mm (1 1/4") long, 16mm (5/8") webbing slot, flange, suits Seldèn profile	8	0.3
PNP296*	Sail slide, half-round, 15mm (5/8") wide, 45mm (13/4") long, 25mm (1") webbing slot, flange, suits Seldèn profile	14	0.5
Slide, External			
PNP47	Sail slide, external, 23.2mm (7/8") internal width x 33mm (1 1/4") long, 20mm (3/4") webbing slot	10	0.4
Sail Feeder			I
RF307	Headsail Pre-Feeder, suits up to 7mm luff tapes	67	2.4
*Salf-Juhricating			



## SAILMAKER HARDWARE



- Products are supplied with screws as shown.
- Larger batten pocket protectors and adjusters are slotted at luff end to allow webbing attachment to slides or cars.
- PNP155 vernier batten adjuster allows fine tuning of batten compression. Low gearing of the vernier screw permits fingertip adjustment, and precise settings are easily repeated with the aid of the graduated window.

PRODUCT No.	DESCRIPTION	WEIGHT g	WEIGHT oz
Hanks			
PNP14	Twist on hank, suits 3mm (1/8") wire, 31mm (1 1/4") long	5	0.2
PNP14A	Twist on hank, suits 4mm (5/32") wire, 34mm (1 11/32") long	6	0.2
PNP14B	Twist on hank, suits 5mm (3/16") wire, 38mm long (1/2") long	7	0.2
PNP88A	Piston hank, suits 6.4mm (1/4") diameter wire, 50mm (2") long	8	0.3
PNP88B	Piston hank, suits 8.0mm (5/16") diameter wire, 72mm (2 7/8") long	15	0.5
PNP88C	Piston hank, suits 11.2mm (7/16") diameter wire, 75mm (3") long	22	0.8
Sail Shackle			
PNP63	Sail shackle, screw-on, 12mm (1/2") x 8mm (5/16") internal clearance, suits slides PNP18T, PNP27T & PNP29T	2	0.1
PNP64	Sail shackle, snap-on, 16mm (5/8") x 11mm (7/16") internal clearance	4	0.1
PNP65	Sail shackle, snap-on, 29mm (1 1/8") x 9mm (3/8") internal clearance	6	0.2
PNP81A	Sail shackle, snap-on, 11mm (7/16") x 8mm (5/16") internal clearance, suits slides PNP18T, PNP27T & PNP29T	2	0.1
PNP81B	Sail shackle, snap-on, 12.7mm (1/2") x 8mm (5/16") internal clearance, suits slides PNP17T, PNP18T & PNP28T	4	0.1
PNP106	Sail shackle, screw-on, 16mm (5/8") x 10mm (3/8") internal clearance	8	0.3
PNP107	Sail shackle, screw-on, 28mm (1 1/8") x 9mm (3/8") internal clearance	6	0.2
PNP108	Sail shackle, screw-on, 29mm (1 1/8") x 13mm (1/2") internal clearance	8	0.3
Batten Pocket	Protectors		
PNP83	Batten pocket protector, suits battens up to 50mm (1 31/32") x 6mm (1/4")	17	0.6
PNP87	Batten pocket protector, suits battens up to 16mm (5/8") x 4mm (5/32")	9	0.3
PNP105	Batten pocket protector, suits batten ends up to 40mm (1 1/2") x 5mm (3/16")	17	0.6
PNP147	Batten pocket protector, suits battens up to 50mm (1 31/32") x 5mm (3/16")	56	2.0
PNP148	Batten pocket protector, heavy duty glass reinforced nylon, suits battens up to 50mm (1 31/32") x 8mm (5/16")	90	3.2
Vernier Batten	Adjuster		
PNP155	Batten receptacle, vernier adjuster, suits 22mm (7/8") x 10mm (13/32") flat battens, or round 13mm (1/2") diameter	148	5.2
PNP162	Batten receptacle, vernier adjuster, suits 30mm (13/16") x 10mm (13/32") flat battens, suits M10 link	152	5.4

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## **HOOKS & CLIPS**





PRODUCT No.	DESCRIPTION	WEIGHT g	WEIGHT oz
Tube Clips			
PNP43A	Tube clip, suits 44mm (1 3/4") diameter tube. Requires 2 x 4mm (5/35") fasteners	15	0.6
PNP43B	Tube clip, suits 38mm (1 1/2") diameter tube. Requires 2 x 4mm (5/35") fasteners	10	0.4
PNP43C	Tube clip, suits 32mm (1 1/4") diameter tube. Requires 2 x 4mm (5/32") fasteners	7	0.3
PNP43D	Tube clip, suits 25mm (1") diameter tube. Requires 2 x 4mm (5/32") fasteners	4	0.1
PNP43E	Tube clip, suits 16mm (5/8") diameter tube. In line fastening. Requires 2 x 3mm (1/8") fasteners	4	0.1
PNP43F	Tube clip, suits 19mm (3/4") diameter tube. In line fastening. Requires 2 x 3mm (1/8") fasteners	4	0.1
Snap Hooks			
PNP13A	Snap hook, narrow. 10mm (3/8") eye clearance. 8mm (5/16") hook clearance	5	0.2
PNP13B	Snap hook, narrow. 8mm (5/16") eye clearance. 5mm (3/16") hook clearance	3	0.1
PNP16	Flag/sister clip. 13mm (1/2") eye clearance	5	0.2
PNP16A	Flag/sister clip. 8mm (5/16") eye clearance	6	0.2
PNP16B	Flag/sister clip. 4.7mm (3/16") eye clearance	2	0.1
PNP56	Shock cord hook. Suits 7mm (1/4") diameter shock cord. 8mm (5/16") hook clearance	12	0.4
PNP56B	Shock cord hook. Suits 5mm (3/16") diameter shock cord. 10mm (3/8") hook clearance	6	0.2
PNP387	Shock cord hook. Suits 3-5mm (1/8"-3/16") diameter shock cord. 6mm (1/4") hook clearance	3	0.1
PNP388	Shock cord hook. Suits 4-6mm (5/32"-1/4") diameter shock cord. 9mm (11/32") hook clearance	8	0.3
PNP389	Shock cord hook. Suits 6-8mm (1/4"- 5/16") diameter shock cord. 10mm (3/8") hook clearance	10	0.3
Fixed Hooks			
PNP3	Hook, 5mm (3/16") hook clearance. 52mm (2") long. Requires 2 x 4mm (5/32") fasteners	3	0.1
PNP5	Hook, 8mm (5/16") hook clearance. 75mm (3") long. Requires 2 x 4mm (5/32") fasteners	8	0.3
PNP20	Tubular jam cleat. Suits up to 4mm (5/32") diameter line. Suits 2 x 5mm (3/16") fasteners	4	0.1
PNP45	Hook, 11mm (7/16") hook clearance. Requires 2 x 4mm (5/32") fasteners	3	0.1
PNP84	Hook, 5mm (3/16") hook clearance. Requires 2 x 5mm (3/16") fasteners	5	0.2
PNP38	Line hanger clip, suits 5mm (3/16") diameter shock cord retaining loop. Knots are concealed in body. Requires 2 x 4mm (5/32") fasteners	8	0.3
RF6010C	Utility line hangers (2 pack), suits 5mm (3/16") diameter shock cord retaining loop. Requires 2 x 5mm (3/16") fasteners	7	0.2
Rope Clips			
PNP576-2	Rope clip, lash-on. Suits 5-10mm (3/16" - 3/8") diameter rope	12	0.4
PNP577-2	Rope clip, cable tie-on. Suits 5-10mm (3/16" - 3/8") diameter rope	12	0.4
PNP578-2	Rope clip, lash-on. Suits 8-14mm (5/16" - 9/16") diameter rope	24	0.8
PNP579-2	Rope clip, cable tie-on. Suits 8-14mm (5/16" - 9/16") diameter rope	24	0.8

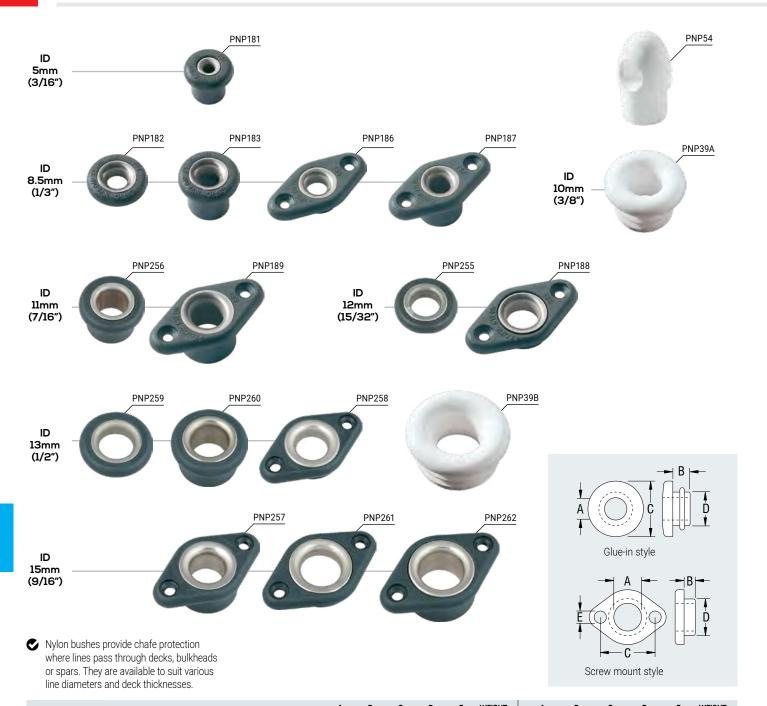


# RINGS, THIMBLES & FAIRLEADS



PRODUCT No.	DESCRIPTION	WEIGHT g	WEIGHT oz
Rings			
PNP11	Ring, 32mm (1 1/4") ID x 6.4mm (1/4") bar diameter	4	0.1
PNP52C	Ring, 19mm (3/4") ID x 4.8mm (3/16") bar diameter	2	0.1
PNP53E	Ring, 44mm (1 3/4") ID x 9.5mm (3/8") bar diameter	13	0.5
PNP265	Ring, 22mm (7/8") ID x 7.6mm (5/16") bar diameter	5	0.2
PNP266	Ring, 28mm (1 1/8") ID x 9.1mm (23/64") bar diameter	10	0.3
Thimbles			
PNP78	Thimble, suits 8mm (5/16") diameter rope. 13mm (1/2") internal clearance	6	0.2
PNP78A	Thimble, suits 10mm (3/8") diameter rope. 15mm (5/8") internal clearance	5	0.2
PNP78B	Thimble, suits 12mm (1/2") diameter rope. 22mm (7/8") internal clearance	10	0.4
PNP78C	Thimble, suits 16mm (5/8") diameter rope. 30mm (1 3/16") internal clearance	13	0.5
Fairleads			
PNP1	Fairlead, 19mm (3/4") ID, white. Requires 2 x 3mm (1/8") fasteners	27	1.0
PNP33	Fairlead, 11mm (7/16") ID, white. Requires 2 x 4mm (5/32") fasteners	4	0.1
PNP33BLK	Fairlead, 11mm (7/16") ID, black. Requires 2 x 4mm (5/32") fasteners	4	0.1
PNP48	Fairlead, 5mm (3/16") clearance, black. Requires 2 x 3mm (1/8") fasteners	4	0.1
PNP49	Fairlead, 10mm (3/8") clearance, white. Requires 2 x 3mm (1/8") fasteners	16	0.6
PNP120	Fairlead, 6.5mm (1/4") ID, stainless steel lined, black. Requires 2 x 3mm (1/8") fasteners	8	0.3
PNP120A	Fairlead, 6mm (3/16") ID, white. Requires 2 x 3mm (1/8") fasteners	2	0.1
PNP121	Fairlead, 8mm (5/16") ID, stainless steel lined, black. Requires 2 x 4mm (5/32") fasteners	8	0.3
PNP121A	Fairlead, 8mm (5/16") ID, white. Requires 2 x 4mm (5/32") fasteners	4	0.1
PNP122	Fairlead, 11.5mm (7/16") ID, stainless steel lined, black. Requires 2 x 5mm (3/16") fasteners	10	0.4
PNP122A	Fairlead, 10mm (3/8") ID, white. Requires 2 x 5mm (3/16") fasteners	6	0.2
PNP123	Fairlead, 13.5mm (1/2") ID, stainless steel lined, black. Requires 2 x 5mm (3/16") fasteners	16	0.5
PNP123A	Fairlead, 11.5mm (7/16") ID, white. Requires 2 x 5mm (3/16") fasteners	9	0.3
PNP124	Fairlead, 16mm (5/8") ID, stainless steel lined, black. Requires 2 x 5mm (3/16") fasteners	24	0.8
PNP124A	Fairlead, 15mm (9/16") ID, white. Requires 2 x 5mm (3/16") fasteners	12	0.4
RF9	Fairlead, 7mm (9/32") ID, black. Requires 2 x 4mm (5/32") fasteners	5	0.2
RF59	Fairlead, 14mm (9/16") ID, stainless steel lined, black. Requires 2 x 5mm (3/16") fasteners	17	0.6
RF374	Fairlead, 12mm x 40mm (1/2" x 1 1/2") ID, black. Requires 1 x 5mm (3/16") & 1 x 6mm (1/4") fasteners	20	0.7
RF2358	Fairlead, 16mm (5/8") ID, stainless steel lined, black. Requires 2 x 5mm (3/16") fasteners	26	0.9





PRODUCT No.	DESCRIPTION	A mm	B mm	C mm	D mm	E mm	WEIGHT g	A in	B in	C in	D in	E in	WEIGHT oz
Bushes							•						
PNP54	Staunchion cap. Suits 22.2mm (7/8") ID tube	-	-	-	-	-	12	-	-	-	-	-	0.4
PNP181	Plastic bush, glue-in, stainless steel lined	5.0	14.0	18.5	13.0	-	5	3/16	9/16	3/4	1/2	-	0.2
PNP182	Plastic bush, glue-in, stainless steel lined	8.5	6.0	22.0	16.0	-	4	11/32	1/4	7/8	5/8	-	0.1
PNP183	Plastic bush, glue-in, stainless steel lined	8.5	14.0	22.0	16.0	-	7	11/32	9/16	7/8	5/8	-	0.2
PNP186	Plastic bush, screw mount, stainless steel lined	8.5	5.0	28.0	16.0	3.0	5	11/32	9/32	1 3/32	5/8	1/8	0.2
PNP187	Plastic bush, screw mount, stainless steel lined	8.5	14.0	28.0	16.0	3.0	8	11/32	9/16	1 3/32	5/8	1/8	0.3
PNP39A	Plastic bush, glue-in	10.0	13.0	22.0	16.0	-	3	3/8	1/2	7/8	5/8	-	0.1
PNP188	Plastic bush, screw mount, stainless steel lined	12.0	6.0	31.0	20.0	3.0	5	15/32	1/4	1 7/32	25/32	1/8	0.2
PNP189	Plastic bush, screw mount, stainless steel lined	11.0	14.0	31.0	20.0	3.0	10	7/16	9/16	1 7/32	25/32	1/8	0.4
PNP255	Plastic bush, glue-in, stainless steel lined	12.0	5.0	25.0	20.0	-	3	15/32	3/16	1	25/32	-	0.1
PNP256	Plastic bush, glue-in, stainless steel lined	11.0	14.0	25.0	20.0	-	7	7/16	9/16	1	25/32	-	0.2
PNP39B	Plastic bush, glue-in	13.0	13.0	33.0	25.0	-	4	1/2	1/2	1 5/16	1	-	0.1
PNP258	Plastic bush, screw mount, stainless steel lined	13.0	5.0	36.0	26.0	4.0	10	1/2	3/16	1 13/32	1 1/32	5/32	0.4
PNP259	Plastic bush, glue-in, stainless steel lined	13.0	5.0	28.0	23.0	-	7	1/2	3/16	1 3/32	25/32	-	0.2
PNP260	Plastic bush, glue-in, stainless steel lined	13.0	13.0	28.0	23.0	-	13	1/2	1/2	1 3/32	25/32	-	0.5
PNP257	Plastic bush, screw mount, stainless steel lined	15.0	19.0	36.0	22.0	4.0	16	9/16	3/4	1 13/32	7/8	5/32	0.6
PNP261	Plastic bush, screw mount, stainless steel lined	15.0	5.0	39.0	28.0	4.0	11	9/16	3/16	1 17/32	1 3/32	5/32	0.4
PNP262	Plastic bush, screw mount, stainless steel lined	15.0	14.0	39.0	28.0	4.0	20	9/16	9/16	1 17/32	1 3/32	5/32	0.7



## **ROPE STOPPER BALLS & HANDLES**

### **TIE BALLS**

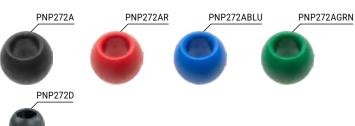
▼ Tie balls have a stepped bore allowing the rope end knot to be contained within the ball. Ideal for control lines





### **HALYARD STOPPERS**

Tough nylon halyard stoppers are ideal for protecting halyard eye splices and whipping twine where they meet sheaves and exit plates. They have a straight bore with constant diameter.





PRODUCT No.	PRODUCT No.	PRODUCT No.	PRODUCT No.	MAX. ROPE mm	OUTSIDE DIAM. mm	WEIGHT g	MAX. ROPE in	OUTSIDE DIAM. in	WEIGHT oz
Tie Balls									
Black	Red	Blue	Green						
RF1318BLK	RF1318R	RF1318BLU	RF1318GRN	4	16	2	5/32	5/8	0.1
RF1317BLK	RF1317R	RF1317BLU	RF1317GRN	5	20	3	3/16	3/4	0.1
RF1316BLK	RF1316R	RF1316BLU	RF1316GRN	5	25	7	3/16	1	0.3
RF1315BLK	RF1315R	RF1315BLU	RF1315GRN	6	32	14	1/4	1 1/4	0.5

PRODUCT No.	PRODUCT No.	PRODUCT No.	PRODUCT No.	INSIDE DIAM. mm	OUTSIDE DIAM. mm	WEIGHT g	INSIDE DIAM. in	OUTSIDE DIAM. in	WEIGHT oz
Halyard Stopper Black	s Red	Blue	Green						
PNP272A	PNP272AR	PNP272ABLU	PNP272AGRN	15.5	32	11	19/32	1 1/4	0.4
PNP272D	-	-	-	11.0	20	3	7/16	3/4	0.1

PRODUCT No.	DESCRIPTION	WEIGHT g	WEIGHT oz
Handle			
PNP207	Handle. 150mm (6") wide. Requires 2 x 6mm (1/4") fasteners	52	1.8
Hinges & Late	hes		
PNP89	Cupboard latch. Requires 3 x 4mm (5/32") fasteners	8	0.3
PNP68C	Hinge. 100mm x 53mm (4" x 2 1/8"). Stainless steel pin. Requires 6 x 4mm (3/16") fasteners	37	1.3
RF308	Hinge, pressed stainless steel. 61mm x 32mm (2 3/8" x 1 1/4"). Requires 4 x 5mm (3/16") fasteners	20	0.7

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## **PLUMBING FITTINGS**





PRODUCT No.	DESCRIPTION	WEIGHT g	WEIGHT oz
Plumbing Fittings			•
PNP131	Non-return valve. Suits 12mm (1/2"), 20mm (3/4") & 25mm (1") ID tube	41	1.4
PNP132A	Skin fitting. Suits 16mm (5/8") ID tube. 20mm (3/4") maximum hull thickness	20	0.7
PNP132B	Skin fitting. Suits 20mm (3/4") ID tube. 38mm (1 1/2") maximum hull thickness	40	1.4
PNP132C	Skin fitting. Suits 25mm (1") ID tube. 38mm (1 1/2") maximum hull thickness	55	1.9
PNP132E	Skin fitting. Suits 38mm (1 1/2") ID tube. 38mm (1 1/2") maximum hull thickness	138	4.8
PNP310	Sink waste. Suits 25mm (1") ID tube, white	25	0.9
PNP310G	Sink waste. Suits 25mm (1") ID tube, grey	25	0.9
PNP315	Sink waste, 90 degree. Suits 25mm (1") ID tube	50	1.7



## **INSPECTION HATCHES & DRAIN PLUGS**



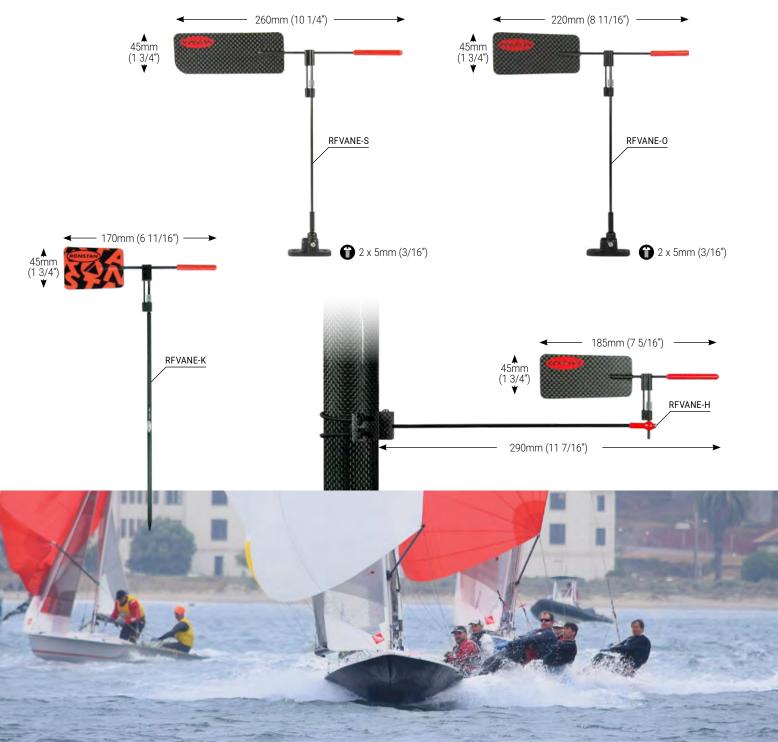
- Drain plugs are fitted with watertight seals and some models have retaining legs to prevent accidental loss. Plugs are available separately as spares.
- Inspection ports provide access to areas under decks or behind bulkheads. Watertight integrity is assured by threaded closure and an O-ring seal.
- Clipped housing flange on PNP245, PNP245BLK, PNP246, PNP246BLK allows plug to be fitted low in hull to maximise drainage.
- PNP390 & PNP393 feature an overlapping threaded lid for a smooth, clean style.
- PNP96, PNP97 and PNP390 are manufactured with dissimilar materials for the lid and deck ring to avoid binding.
- Impact resistant, UV stabilised nylon.

PRODUCT No.	DESCRIPTION	REPLACEMENT O-RING	REPLACEMENT PLUG	CUTOUT DIAM. mm	WEIGHT g	CUTOUT DIAM. in	WEIGHT oz
Drain Plugs							
PNP241	Drain plug & housing, nylon, white	-	PNP241A	19	10	3/4	0.4
PNP242	Drain plug & housing, nylon, white	PNP242B	PNP242A	25	10	1	0.3
PNP243	Drain plug & housing, nylon, white	PNP243B	PNP243A	30	16	1 3/16	0.6
PNP245	Drain plug & housing, nylon, white	PNP245B	PNP245A	40	27	17/16	0.9
PNP245BLK	Drain plug & housing, nylon, black	PNP245B	PNP245ABLK	40	27	17/16	0.9
PNP246	Drain plug & housing, nylon, white	PNP246B	PNP246A	50	38	2	1.3
PNP246BLK	Drain plug & housing, nylon, black	PNP246B	PNP246ABLK	50	38	2	1.3
RF294	Drain plug & housing, coarse thread, nylon, black	-	RF738	24	10	15/16	0.4
RF734	Drain plug & housing, low profile, chromed brass	-	-	24	70	15/16	2.5
RF737	Drain plug & housing, chromed brass body, nylon plug	-	RF738	24	45	15/16	1.6

PRODUCT No.	DESCRIPTION	REPLACEMENT 0-ring	REPLACEMENT LID	OPENING DIAM. mm	OUTSIDE DIAM. mm	CUTOUT DIAM. mm	WEIGHT g	OPENING DIAM. in	OUTSIDE DIAM. in	CUTOUT DIAM. in	WEIGHT oz
Inspection Hatches											
PNP96	Inspection hatch, white	-	-	102	144	112	94	4	5 5/8	4 1/2	3.3
PNP97	Inspection hatch, white	-	-	129	170	139	115	5 1/8	6 11/16	5 1/2	4.1
PNP390	Inspection hatch, white	-	-	150	192	163	166	5 7/8	7 9/16	6 7/16	5.8
PNP393	Inspection hatch, black	-	-	200	258	218	350	8	10 5/32	8 9/16	12.3
PNP393W	Inspection hatch, white	-	-	200	258	218	350	8	10 5/32	8 9/16	12.3
RF530	Inspection hatch, white	RF531	RF530LIDSW	106	148	122	110	4 3/16	5 3/16	4 13/16	3.9

## **WIND VANE PRO**





© St. Francis Yacht Club / Amanda Witherell

- Ultra-lightweight, handmade composite wind vanes.
- Accurate from 0.8 to 40 knots.
- Suits small keelboats and dinghies with vertical or parallel mounting options.
- Perfect for every kind of performance sailing.
- Crazy Kids is specifically designed for carbon-free dinghies to 3.5m (12ft), mast top vane mounting plugs supplied by mast manufacturer.
- Horizontal is designed for boats to 5m (16ft) with adjustable mast clamp.
- ① Olympic is designed for off-the-beach classes to 6m (20ft)
- Sportsboat is designed for boats to 8.5m (28ft).

PRODUCT No.	DESCRIPTION	MAX. BOAT m	SIZE (W x H) mm	WEIGHT g	MAX. BOAT ft	SIZE (W x H) in	WEIGHT oz
Wind Indicators							
RFVANE-K	Fibreglass – Crazy Kids	3.5	170 x 320	22	12	7 x 12 1/2	0.8
RFVANE-H	Carbon – Horizontal	5	360 x 90	37	16	14 x 3 1/2	1.3
RFVANE-0	Carbon - Olympic	6	220 x 270	27	22	8 1/2 x 10 1/2	1.0
RFVANE-S	Carbon - Sportsboat	8.5	260 x 290	27	28	10 x 11	1.0



## WIND INDICATORS



- Windex® wind indicators feature apparent wind angle indication, adjustable tacking angle arms, lightweight plastic and alloy construction, and sapphire jewel bearings for extreme sensitivity.
- Windex® WXLED light illuminates vane & arms for night sailing. Featuring a non-dazzling lens, 12 volts low power consumption LED globe. Encased in a sealed waterproof housing. Fits directly to WX10, WX15 and WX23 mounts.
- WXD Dinghy Windex® features a spring loaded, quick release mount.
- WX10, WX15 and WX23 feature a secure screw-on mount.
- WX10, WX15 and WX23 feature vane and arm underside reflectors for night sailing.
- PNP301 wind vane is balanced for accuracy and moulded in UV stabilised nylon. It has adjustable tacking angle arms and can be removed from the mast bracket for convenience and security.
- WXD Dinghy Windex® is specifically designed for dinghies.
- WX10 Medium Windex® is specifically designed for trailerables and small keelboats.
- ↑ WX15 Large Windex® is specifically designed for keelboats.

  ↑ Output

  ↑ Description

  ↑ Output

  ↑ Description

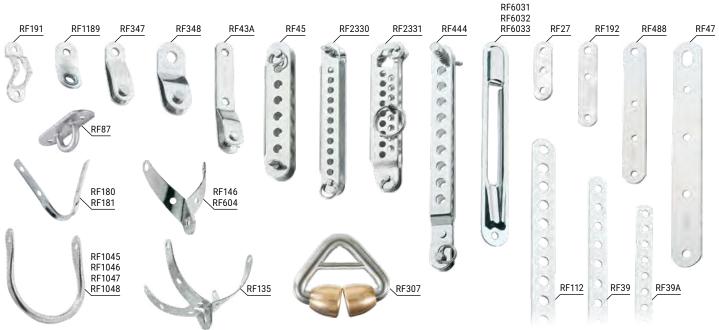
  ↑ Descri
- WX23 Extra Large Windex® is specifically designed for large keelboats.

PRODUCT No.	DESCRIPTION	VANE LENGTH mm	WEIGHT g	VANE LENGTH in	WEIGHT oz
Wind Indicators					
PNP301	Arrow style wind vane. Mounting bracket and screws included.	220	18	8 5/8	0.6
WXD	Dinghy Windex*, spring clip mount and screws included	250	35	10	1.2
WX10	Medium Windex*, 8mm (5/16*) bolt-on mount, nut and washer included	250	40	10	1.4
WX15	Large Windex", 8mm (5/16") bolt-on mount, nut and washer included	380	100	15	3.5
WX23	Extra Large Windex*, 8mm (5/16") bolt-on mount, nut and washer included	580	285	23	10.0
WXLED	Windex'LED light	-	15	-	0.5
WX15-BIRD	Windex* BirdSpike suits WX15, Carbon Fibre	-	4	-	0.1

PRODUCT No.  Spare Parts	DESCRIPTION	PRODUCT No. To suit wxd	PRODUCT No. TO SUIT WX10	PRODUCT No. TO SUIT WX15	PRODUCT No. TO SUIT WX23	PRODUCT No. To suit wxled
Arms	Arms	WXD-A	WX10-A	WX15-A	WX23-A	-
Rods	Supporting rod	WXD-R	WX10-R	WX15-R	WX23-R	-
Sockets	Mast socket	WXD-S	WX10-S	WX15-S	WX23-S	-
Vanes	Vane unit	WXD-V	WX10-V	WX15-V	WX23-V	-
Globes	Spare globe	-	-	-	-	WXL-G

# STAY ADJUSTERS, HOUNDS & TANGS





			1
PRODUCT No.	DESCRIPTION	WEIGHT g	WEIGHT oz
Mast Tangs & Ho	unds		
RF43A	Tang. 5mm (3/16") diameter clevis pin. 76mm (3") long. 2 x 5mm (3/16") diameter fixing holes	15	0.5
RF146	Mast hound to suit mast diameters between 76mm-115mm (3"-41/2")	110	3.9
RF347	Tang. 6.4mm (1/4") diameter clevis pin. 51mm (2") long. 1 x 6.4mm (1/4") diameter fixing hole	20	0.7
RF348	Tang. 8mm (5/16") diameter clevis pin. 64mm (21/2") long. 1 x 9.5mm (3/8") diameter fixing hole	40	1.4
RF604	Mast hound to suit mast diameters 51mm-64mm (2"-2 1/2")	30	1.1
RF1189	Tang. 6.4mm (1/4") ferrule eye. 38mm (1 1/2") long. 1 x 5mm (3/16") diameter fixing hole	10	0.4
Boom Hangers			
RF87	Boom hanger. 10mm (3/8") internal clearance. 5mm (3/16") diameter loop. 2 x 5mm (3/16") diameter fixing holes	15	0.5
RF135	Four point hanger. Slotted attachment hole allows shackle body to be passed through. 8 x 5mm (3/16") diameter fixing holes	35	1.2
RF180	Strip hanger. 64mm (2 1/2") long. 4 x 5mm (3/16") diameter fixing holes	20	0.7
RF181	Strip hanger. 55mm (2 1/4") long. 4 x 5mm (3/16") diameter fixing holes	20	0.7
RF1045	Boom hanger. 80mm (3 1/8") long. 65mm (2 1/2") wide. Bar diameter 6.4mm (1/4"). 2 x 6.6mm (1/4") diameter fixing holes	45	1.6
RF1046	Boom hanger. 100mm (4") long. 80mm (3 1/8") wide. Bar diameter 6.4mm (1/4"). 2 x 6.6mm (1/4") diameter fixing holes	54	1.9
RF1047	Boom hanger. 125mm (5") long. 80mm (3 1/8") wide. Bar diameter 7.9mm (5/16"). 2 x 8.1mm (5/16") diameter fixing holes	107	3.8
RF1048	Boom hanger. 150mm (6") long. 115mm (4 1/2") wide. Bar diameter 9.5mm (3/8"). 2 x 10mm (3/8") diameter fixing holes	190	6.7
Exit Plates & Hal	yard Lock		
RF191	Halyard lock for locking halyards off on a copper ferrule	5	0.2
RF6031	Exit plate, stainless steel, slot width 10mm (3/8"), 159 x 21mm (6 1/4" x 13/16") overall	45	1.6
RF6032	Exit plate, stainless steel, slot width 12mm (1/2"), 203 x 26mm (8" x 1") overall	70	2.5
RF6033	Exit plate, stainless steel, slot width 17mm (11/16"), 210 x 28mm (8 1/4" x 1 1/8") overall	73	2.5
Sail Feeder			
RF307	Headsail Pre-Feeder, suits up to 7mm luff tapes	67	2.4

PRODUCT No.	LENGTH OVERALL mm	RANGE OF Adjustment mm	PIN DIAM. mm	INCREMENTS mm	WEIGHT g	LENGTH OVERALL in	RANGE OF Adjustment in	PIN DIAM. in	INCREMENTS in	WEIGHT oz	NO. OF Adjustment Settings
Stay Adjusters											
RF45	108	75	6.4	12.5	60	4 1/4	3	1/4	1/2	2.1	7
RF444	174	115	6.4	12.5	90	67/8	4 1/2	1/4	1/2	3.2	10
RF2330	117	87	4.8	8.0	40	4 5/8	3 7/16	3/16	5/16	1.4	12
RF2331	115	64	4.8	4.0	65	4 1/2	21/2	3/16	5/32	2.3	17

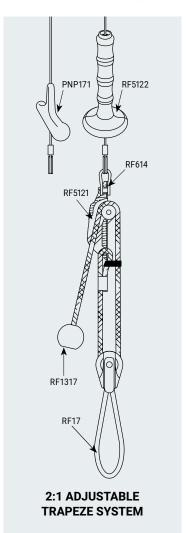
PRODUCT No.	DESCRIPTION	HOLE SPACING mm	LENGTH OVERALL mm	WIDTH x THICKNESS mm	HOLE DIAMS.	WEIGHT g	HOLE Spacing in	LENGTH OVERALL in	WIDTH x THICKNESS in	HOLE DIAMS.	WEIGHT oz
Chain Plates &	Perforated Strip										
RF27	Chain plate	-	48.6	16.0 x 1.5	5.0	5	-	2	5/8 x 1/16	3/16	0.2
RF39	Perforated strip	15.9	925	15.9 x 1.5	6.6	144	5/8	36 13/32	5/8 x 1/16	1/4	5.1
RF39A	Perforated strip	12.7	915	12.7 x 1.5	5.0	127	1/2	36 1/16	1/2 x 1/16	3/16	4.5
RF47	Chain plate	-	203	25.0 x 1.5	1 x 9.5 + 3 x 6.4	60	-	8	1 x 1/16	1 x 3/8 + 3 x 1/4	2.1
RF112	Perforated strip	15.9	896	19.0 x 2.0	8.1	222	5/8	35 1/4	3/4 x 5/64	5/16	7.8
RF192	Chain plate	-	76	16.0 x 1.5	1 x 6.4 + 2 x 5.0	10	-	3	5/8 x 1/16	1 x 1/4 + 3 x 3/16	0.4
RF488	Chain plate	-	127	19.0 x 3.0	1 x 6.4 + 2 x 5.0	53	-	5	3/4 x 1/8	1 x 1/4 + 3 x 3/16	1.9



## TRAPEZE HARDWARE







PRODUCT No.	DESCRIPTION	WEIGHT g	WEIGHT oz
Trapeze Hardw	are		
PNP171BLU	Trapeze handle, 120mm (43/4") long, nylon, blue	25	0.9
PNP171R	Trapeze handle, 120mm (43/4") long, nylon, red	25	0.9
RF9	Fairlead, nylon, ID 7mm (1/4")	5	0.2
RF17	Trapeze ring, oversize 6mm (7/32") diameter loop, incorporating Series 20 ball bearing sheave	84	3.0
RF27	Toe strap plate, stainless steel, 50mm x 16mm (2" x 5/8"), 5mm (3/16") diameter holes	5	0.2
RF48B	Trapeze ring, twin loop, stainless steel, 166mm (6 1/2") long	48	1.7
RF341	Single V-jam block, becket, removable clevis pin top	30	1.1
RF5121	Trapeze cleat, aluminium, suits 4-8mm (5/32"-5/16") diameter rope	46	1.6
RF5122R-2	Trapeze handles, vertical grip, red, hole diameter 7mm (9/32") (pair)	85	3.0

PRODUCT No.	PRODUCT No.	PRODUCT No.	PRODUCT No.	MAX. ROPE mm	OUTSIDE DIAM. mm	WEIGHT g	MAX. ROPE in	OUTSIDE DIAM. in	WEIGHT oz
Red Tie Ball	Blue Tie Ball	Black Tie Ball	Green Tie Ball						
RF1317R	RF1317BLU	RF1317BLK	RF1317GRN	5	20	3	3/16	3/4	0.1

# **SPINNAKER & SPAR HARDWARE**





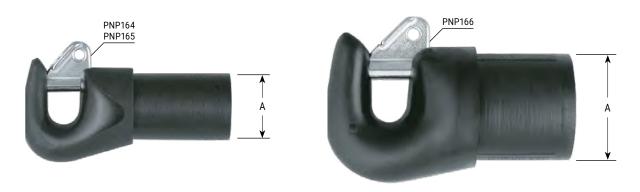


PRODUCT No.	DESCRIPTION	DOUGHNUT DIAM. mm	ROPE DIAM. mm	WEIGHT g	DOUGHNUT DIAM. in	ROPE DIAM. in	WEIGHT oz
Spinnaker Bra	ce 'Doughnut'						
PNP197R	Red	40	10	7	1 9/16	3/8	0.2
PNP197GRN	Green	40	10	7	1 9/16	3/8	0.2
PNP198R	Red	60	12	22	2 3/8	7/16	0.8
PNP198GRN	Green	60	12	22	2 3/8	7/16	0.8
PNP199R	Red	70	18	34	2 3/4	5/8	1.2

PRODUCT No.	DESCRIPTION	RING I.D. mm	MATERIAL DIAM. mm	MAST DIAM. mm	WEIGHT g	RING I.D. in	MATERIAL DIAM. in	MAST DIAM. in	WEIGHT
T NODOOT NO.	DECOMI TION			•••••	9				UL.
Spinnaker Pole	Rings								
RF30	Curved base	30	6.4	60	45	1 3/16	1/4	2 3/8	1.6
RF41	Curved base	44	11.0	80	260	1 3/4	7/16	3 1/8	9.2
RF602	Curved base	35	8.0	60	80	1 3/8	5/16	2 3/8	2.8
Spinnaker Har	dware								
RF91	Spinnaker brace hook, accepts up to 6mm $(1/4^{\circ})$ diameter line, $1/4^{\circ}$ diameter bolt-th attachment (includes 2 x self-tapping screws), neoprene pad and line retainer	rough			40				1.4
RF92	Spinnaker brace hook, screw-on attachment, (includes two 8g self-tapping screws), neoprene pad and line retainer				20				0.7
PNP94	Spinnaker pole deck bracket, suits poles to 70mm (2 3/4") diameter				75				2.7
Mast Chock									
PNP200	Mast chock set, 8 pieces; with total thickness 70mm (2 3/4"); 1 x 20mm (25/32") pie 5 x 10mm (13/32") pieces, suits mast with 50-60mm (2" - 2 3/8") diameter	ece,			134				4.7



## SPINNAKER POLE ENDS







- Small boat pole ends have push-on beak designs that allow attachment to the pole ring without manually opening the pin.
- All pole ends have attachment points for pin opening lines.

RF1663

- PNP164, PNP165 and PNP166 small boat pole ends are manufactured from tough, abrasion resistant nylon for minimum weight and corrosion resistance.
- RF600, RF601 and RF677 suit external fitting on solid or tubular sections.
- Keelboat pole ends suit standard tube sizes and have rugged, external-pull construction for reliability and easy servicing.

74

900

215/16

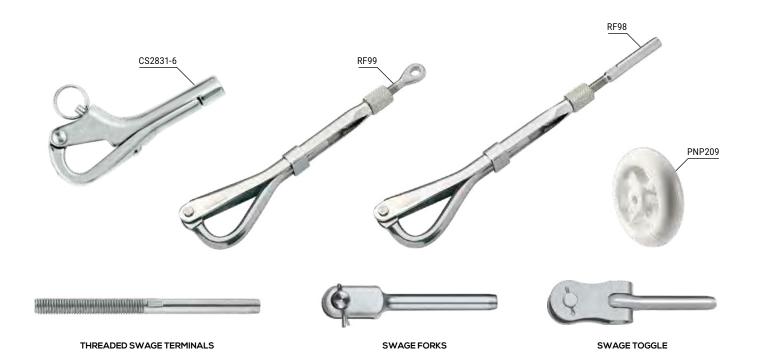
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PRODUCT No.	DESCRIPTION	A mm	WEIGHT g	A in	WEIGHT oz
Spinnaker Pole	Ends - Small Boat		•		
PNP164	Nylon body, stainless steel push-on plunger pin, accepts up to 8mm (5/16") diameter ring or line	21	33	13/16	1.2
PNP165	Nylon body, stainless steel push-on plunger pin, accepts up to 12mm (1/2") diameter ring or line	28	46	1 1/8	1.6
PNP166	Nylon body, stainless steel push-on plunger pin, accepts up to 12mm (1/2") diameter ring or line	46	125	1 13/16	4.4
RF600	Stainless steel body, stainless steel snap-on plunger pin and straps, accepts up to 9.5mm (3/8") diameter ring or line	26	175	1	6.2
RF601	Stainless steel body, stainless steel snap-on plunger pin and straps, accepts up to 9.5mm (3/8") diameter ring or line	36	180	1 7/16	6.3
RF677	Stainless steel body, stainless steel snap-on plunger pin and straps, accepts up to 9.5mm (3/8") diameter ring or line	32	175	1 1/4	6.2
Spinnaker Pole	Ends - Keelboat				
RF1661	Anodised aluminium body, stainless steel plunger pin, accepts up to 20mm (3/4") diameter ring or line	46	483	1 13/16	17.0
RF1662	Anodised aluminium body, stainless steel plunger pin, accepts up to 20mm (3/4") diameter ring or line	56	670	2 3/16	23.7

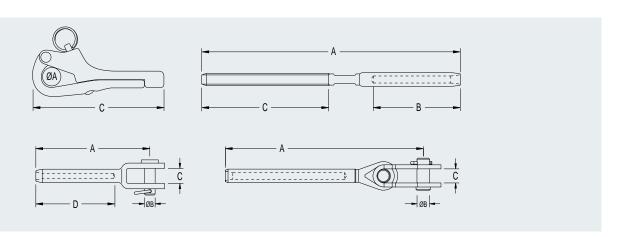
Anodised aluminium body, stainless steel plunger pin, accepts up to 20mm (3/4") diameter ring or line

# **LIFE LINE HARDWARE**





- RF98, RF99: Pelican hooks are manufactured from stainless steel and have threaded tensioning adjustment, a long lever arm to facilitate closing under tension and a sliding sleeve retainer for quick opening and closing.
- ▼ PNP209 roller is used on life lines, above spreaders and on back stays to assist tacking and prevent sail chafe. It has a snap-together design that allows fitting to existing rigging.



PRODUCT No.	DESCRIPTION	WIRE DIAM.	THREAD	A mm	B mm	C mm	D mm	WEIGHT g	A in	B in	C in	D in	WEIGHT oz
Pelican Hooks													
RF98	Pelican hook, swage end, BL 400kg (880lb)	4mm (5/32")	1/4"	15				112					4.0
RF99	Pelican hook, 6.4mm (1/4") diameter eye end, BL 400kg (880lb)	-	1/4"	15				115					4.1
CS2831-6	Pelican hook	-	M6	10	-	97	-	70	3/8	-	3 13/16	-	2.4
Swage Fork, Sw	age Toggle & Threaded Swage Terminal												
RF1507M0404	Swage Toggle	4mm (5/32")	-	87.1	6.2	7.8	-	44	37/16	1/4	5/16	-	1.6
RF1509M0405	Swage Fork	4mm (5/32")	-		7.8			34		5/16"			1.2
CS7803-04M5	Swage Fork	3mm (1/8")	-	5.0	7	38	22	27/8	3/16	9/32	1 1/2	-	0.7
CS7803-05	Swage Fork	4mm (5/32")	-	8.0	11	45	44	3	5/16	7/16	1 3/4	-	1.6
CS7801-M03M6	Threaded swage terminal	3mm (1/8")	M6	98	40	48	-	23	37/8	1 5/8	1 7/8	-	0.8
CS7801-M04M6	Threaded swage terminal	4mm (5/32")	M6	111	45	48	-	26	4 3/8	1 3/4	17/8	-	0.9
Anti-Chafe / Life	Line Roller												
PNP209	Spreader / backstay / life line roller, nylon	5mm (3/16")						38					1.3



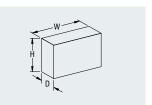
## **COCKPIT ACCESSORIES**











- Fibreglass entry edge rods for easy opening (rope bags).
- Mounting: hook-and-loop fixing, screw-on option for rope bags (screws not provided).
- Mesh panels for drainage & ventilation.

DESCRIPTION	W mm	H mm	D mm	WEIGHT g	W in	H in	D in	WEIGHT oz
				-				
Rope bag, grey PVC with mesh, wide	300	200	180	450	11 13/16	7 7/8	7 3/32	15.9
Rope bag, grey PVC with mesh, wide	400	250	200	650	15 3/4	9 27/32	7 7/8	22.9
Rope bag, grey PVC with mesh, wide	500	300	220	830	19 11/16	11 13/16	8 21/32	29.3
Pocket								
Winch handle pocket, grey PVC with mesh	140	280	90	230	5 17/32	11 1/32	3 7/32	8.1
Drink holder, grey PVC with mesh	130	130	90	130	51/8	5 1/8	3 17/32	4.6
	Rope bag, grey PVC with mesh, wide Rope bag, grey PVC with mesh, wide Rope bag, grey PVC with mesh, wide  Pocket Winch handle pocket, grey PVC with mesh	Rope bag, grey PVC with mesh, wide 300 Rope bag, grey PVC with mesh, wide 400 Rope bag, grey PVC with mesh, wide 500  Pocket Winch handle pocket, grey PVC with mesh 140	Rope bag, grey PVC with mesh, wide 300 200 Rope bag, grey PVC with mesh, wide 400 250 Rope bag, grey PVC with mesh, wide 500 300  Pocket  Winch handle pocket, grey PVC with mesh 140 280	Rope bag, grey PVC with mesh, wide 300 200 180 Rope bag, grey PVC with mesh, wide 400 250 200 Rope bag, grey PVC with mesh, wide 500 300 220  Pocket Winch handle pocket, grey PVC with mesh 140 280 90	Rope bag, grey PVC with mesh, wide 300 200 180 450 Rope bag, grey PVC with mesh, wide 400 250 200 650 Rope bag, grey PVC with mesh, wide 500 300 220 830  Pocket  Winch handle pocket, grey PVC with mesh 140 280 90 230	DESCRIPTION         mm         mm         mm         g         in           Rope bag, grey PVC with mesh, wide         300         200         180         450         1113/16           Rope bag, grey PVC with mesh, wide         400         250         200         650         153/4           Rope bag, grey PVC with mesh, wide         500         300         220         830         1911/16           Pocket           Winch handle pocket, grey PVC with mesh         140         280         90         230         517/32	DESCRIPTION         mm         mm         mm         g         in           Rope bag, grey PVC with mesh, wide         300         200         180         450         1113/16         77/8           Rope bag, grey PVC with mesh, wide         400         250         200         650         15 3/4         9 27/32           Rope bag, grey PVC with mesh, wide         500         300         220         830         19 11/16         11 13/16           Pocket           Winch handle pocket, grey PVC with mesh         140         280         90         230         5 17/32         11 1/32	DESCRIPTION         mm         mm         mm         g         in         in         in           Rope bag, grey PVC with mesh, wide         300         200         180         450         1113/16         77/8         73/32           Rope bag, grey PVC with mesh, wide         400         250         200         650         153/4         927/32         77/8           Rope bag, grey PVC with mesh, wide         500         300         220         830         1911/16         1113/16         821/32           Pocket           Winch handle pocket, grey PVC with mesh         140         280         90         230         517/32         111/32         37/32

# **CABLE STEERING HARDWARE & BUOYS**





- Steering cable pulleys have durable acetal sheaves with a deep groove to cradle 5mm (3/16") diameter wire.
- Pulley housings are stainless steel (except RF2417 which is chrome plated bronze.)
- RF111 is made from durable, UV stabilised high density polyethylene with two-way rope grooves and an eye at each end for maximum versatility.

PRODUCT No.	DESCRIPTION	M.W.L. kg	B.L. kg	WEIGHT g	M.W.L. lb	B.L. lb	WEIGHT oz
Steering Cable	Pulleys						
RF144	Pulley, single 65mm (2 1/2") diameter pulley. 4.8mm (3/16") diameter swivel shackle top	350	750	75	770	1650	2.7
RF154	Pulley, single 65mm (2 1/2") diameter pulley. 13mm (1/2") ID ring brass swivel ring top	300	600	80	660	1320	2.8
RF155	Pulley, double 65mm (2 1/2") diameter pulley. 13mm (1/2") ID ring brass swivel ring top	150	600	135	330	1320	4.8
RF2416	Pulley, single 32mm (1 1/4") diameter pulley. Upright mount	300	800	40	660	1760	1.4
RF2419	Pulley, single 55mm (2 1/8") diameter pulley. Flat mount	500	1500	80	1100	3300	2.8
RF2420	Pulley, single 55mm (2 1/8") diameter pulley. Upright mount	900	1800	70	1980	3960	2.5
RF2421	Pulley, single 55mm (2 1/8") diameter pulley with becket. Upright mount	350	1300	75	770	2860	2.7
RF2422	Pulley, single 65mm (2 1/2") diameter pulley. Loop top	700	1800	60	1540	3960	2.1
Steering Acces	ssories						
RF149	Steering cable tension spring. stainless steel	-	-	75	-	-	2.7
RF2415	Cable clamp. Suits 5mm (3/16") diameter wire	-	-	30	-	-	1.1
Buoys							
RF111	Marker buoy, UV stabilised high density polyethylene, supports 9kg, red. Overall length: 483mm (19"). Maximum diameter: 184mm (7 1/4")	-	-	680	-	-	24.0



## BOATSMART™ BOAT CARE PRODUCTS







#### **GELCOAT POLISH RF2632**

- Ideal for restoring chalky and deteriorated surfaces.
- ldeal for preparing fibreglass surfaces and detailing fibreglass moulds.
- Waxless, silicone-free formula can be overpainted.
- Designed for power buffing.
- Liquid formulation.

#### SUPER FINE PASTE POLISH RF3001

- ldeal for enhancing and protecting surfaces in good condition.
- Suitable for use on fibreglass and painted surfaces.
- Ideal for cleaning and protecting stainless steel and chrome plated fittings.
- Contains waxes to promote high lustre and depth of colour
- Contains silicone to ensure long lasting shine.
- Contains mild abrasive.
- No-run paste formulation.

### EXTRA CUT PASTE POLISH RF3002

- Ideal for restoring weathered or rough surfaces.
- Suitable for use on fibreglass or enamel surfaces.
- Contains waxes to promote high lustre and depth of colour.
- Contains silicone to ensure long lasting shine.
- Contains effective abrasives to remove marks, scuffing and surface oxidation.
- No-run paste formulation.

#### GELCOAT RESTORER RF3005, RF3005X5.0

- Ideal for restoring fibreglass to its original colour.
- Removes difficult stains rust, brown waterline discolouration etc.
- Fast acting 5 minute reaction time.
- Easy sponge-on, hose-off application.

#### SAILFAST™ SILICONE LUBRICANT SPRAY RF3004

- Silicone based for ultimate anti-friction performance.
- Forms a protective anti-corrosive film against the elements.
- Displaces moisture.
- Penetrates and loosens seized mechanical parts.
- Ideal for use on blocks, travellers, cam cleats, winches, steering gear, spinnaker pole ends, rope clutches, snap shackles, head foils, track slides, furlers, swivels, halyard sheaves, and rigging screws.

Material Data Sheets are available under the **SUPPORT** tab at www.ronstan.com.

PRODUCT No.	DESCRIPTION	VOLUME	WEIGHT g	WEIGHT oz
Boat Care Prod	ucts			
RF2632*	Gelcoat polish	1 litre	1270	44.8
RF3001*	Super fine paste polish	-	500	17.7
RF3002*	Extra cut paste polish	-	500	17.7
RF3004*	Sailfast™ silicone lubricant spray	125 ml	145	5.1
RF3005*	Gelcoat restorer	500 ml	590	20.8
RF3005X5.0*	Gelcoat restorer	5 litre	5700	201