

Type-W through flow impellers

- ★ More ferrite - Higher weld speeds
- ★ Interchangeable coolant fittings
- ★ Longer life - ferrite cannot fall out
- ★ Higher strength, high temperature casing
- ★ Reduced price.



EHE's new "Type-W" series of through flow impellers covers diameters from 10 to 37mm, and offers improved performance & operating life with the convenience of interchangeable coolant couplings. Even with these improvements, the new impellers actually cost less than their conventional counterparts.

Type-W impellers are available with either a full length, or a shortened outer casing that allows the last 25mm of ferrite to extend beyond the case. Exposed ferrite impellers provide additional clearance between the impeller & the tube I.D. in the critical weld area, and are also self cleaning since the laminar flow of coolant across the ferrite washes away any weld spume or coating ejected from the weld zone.

The key element in these new impellers is a beryllium copper retaining clip which holds the ferrite in place at a point well "upstream" from the weld point. Most impellers fail because heat from the weld eventually causes sufficient damage to the casing that the ferrite is released. The "W" shaped retainer is attached to the impeller well ahead of the area where damage is likely to occur in normal use, so the impellers last longer.

These new impellers also permit higher weld speeds without any increase in weld power. This is because EHE's precision Ferromax 2000™ ferrite allows a closer fit within the epoxy/glass case. In some instances, speed increases of 20% are possible.

EHE, Inc.

P.O. Box 7139, Bonney Lake, WA 98390 USA Phone: 1-360-829-0168 Fax: 1-360-829-0170 email: impeder@sprynet.com

INTERCHANGEABLE FITTINGS

Type-W impederes are supplied with a brass or aluminium threaded bushing which is pressed into the front end of the high strength filament wound casing.

The female threads in the impeder accommodate a wide range of male & female coupling types, including NPT & BSP pipe threads, SAE flare fittings, hose barbs & ISO metric threads. The nine fittings shown in this photo represent a small selection of the many types that are available.



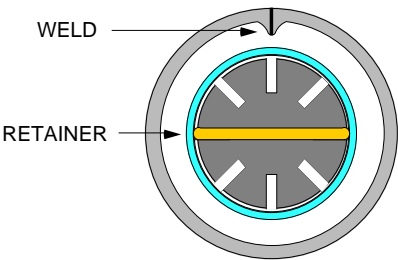
PATENTS PENDING

The key to the new design is a specially shaped beryllium-copper spring clip (Wishbone™ clip), which holds the ferrite in place & eliminates the need for the sleeve & staked pins used in conventional designs. The Wishbone™ clip holds the ferrite flush with the end of the casing, so there is no overhang. At the same time, the clip is attached to the casing 50mm (2") ahead of the weld point, greatly reducing its exposure to heat damage from the weld. The Wishbone™ clip is inserted into the impeder casing from the inside, & snaps in place in the predrilled holes. When the ferrite is in place, the clip is trapped in position & cannot be removed unless the ferrite is removed from the impeder first.

Unlike other impederes using stainless steel wire retainers, our impederes use beryllium copper. BeCu is 97.5% copper so it has far lower thermal & electrical resistance than stainless. It is also more than twice as strong.

For optimum cooling & maximum life, we recommend installing these impederes with the retainer positioned horizontally, as shown here.

The high strength filament wound tubing does not normally require pins to hold the coupling in place. The increased strength allows the tubing to expand slightly when the bushing is pressed in, tightly holding it in place. Pins or screws can be added for a small additional charge, if preferred.



PRICE LIST - TYPE-W IMPEDERS

PART #	O.D. (mm.)	O.D. (inch)	FERRITE	THREAD	UNIT PRICE
W-10-200E	10.00mm	0.394"	FRS-08	1/4-28	\$16.00
W-11-200E	11.00mm	0.433"	FRS-09	1/4-28	\$17.00
W-12-200E	12.00mm	0.472"	FRS-10	3/8-24	\$17.50
W-13-200E	13.00mm	0.512"	FRS-11	3/8-24	\$18.00
W-14-200E	14.00mm	0.551"	FRS-12	3/8-24	\$19.00
W-15-200E	15.00mm	0.591"	FRS-13	7/16-20	\$20.00
W-16-200E	16.00mm	0.630"	FRS-14	7/16-20	\$21.00
W-17-200E	17.00mm	0.669"	FRS-15	7/16-20	\$22.00
W-19-200E	19.00mm	0.748"	FRS-16	7/16-20	\$25.00
W-22-200E	22.00mm	0.866"	FRS-18	5/8-18	\$30.00
W-25-200E	25.00mm	0.984"	FRS-21	5/8-18	\$37.00
W-28-200E	28.00mm	1.102"	FRS-24	5/8-18	\$45.00
W-31-200E	31.00mm	1.220"	FRS-27	5/8-18	\$54.00
W-34-200E	34.00mm	1.339"	FRS-30	5/8-18	\$63.00
W-37-200E	37.00mm	1.457"	FRS-33	5/8-18	\$79.00

The above prices are for 230mm (9 inch) long impederes. For 330mm, multiply price x 1.45, for 430mm, multiply by 1.9.