



## Water Removal

Available for all spin-on and cartridge filter elements.

Media code "A" specifies G7 Dualglass media co-pleated with water removal scrim to produce a filter that can remove water while maintaining  $\beta_{x_{[c]}} = 1000$  efficiency down to  $1\mu / 2.5\mu_{[c]}$ .

### WATER CONTAMINATION

Free and dissolved water in hydraulic and lube systems leads to bearing fatigue, accelerated abrasive wear, corrosion of metal surfaces, increased electrical conductivity, viscosity variance, loss of lubricity, and fluid additive breakdown. Sources include condensation, reservoir leakage, worn actuator seals, heat exchanger leakage, new oil and more.

Filter elements with water removal media can bring high water counts down. Most water removal elements utilize low efficiency (nominally rated) media. We combine the best of both worlds by removing the water while maintaining our  $\beta_{x_{[c]}} = 1000$  particulate removal efficiency and ensuring that none of the gel particles are released back into the system. Water removal is available with any of our glass media selections from  $1\mu$  to  $40\mu$ . There is a price adder to the glass element price so please consult the price list or call Hy-Pro before quoting.

### CAPACITY BY COMMON SERIES

Hy-Pro Element	Capacity H <sub>2</sub> O	
	Liters	Ounces
HP75L8-*AB	0.7	23
HP101L18-*AB	2.5	84
HP101L36-*AB	5.1	172
HP102L18-*AB	1.9	65
HP102L36-*AB	3.3	112
HP83L16-*AB	1.7	57
HP83L39-*AB	3.6	123
HP8314L39-*AB	5.9	200
HP8310L39-*AB	6.2	207
HPKL9-*AB	0.6	21
HP60L8-*AB	0.5	15
HP25L9-*AB	0.4	12

### WATER REMOVAL APPLICATION - BULK OIL CONDITIONING

Fluid volume: 250 gallons, 1000 liters  
Initial ppm H<sub>2</sub>O: 12000 ppm, Final ppm H<sub>2</sub>O: < 50 ppm

A power plant planned to use a vacuum dehydrator to remove the water from 1000 liters of hydraulic oil. Dehydrator rental was expensive and required one month minimum. As an alternative Hy-Pro element HP8314L39-6AB (A media code = G7 Dualglass + water removal) was applied. Hy-Pro estimated that 2 elements would bring the ppm levels below the target. After the second element was removed the ppm level was below 50 ppm H<sub>2</sub>O. A third element was installed but did not reach terminal  $\Delta p$  before the fluid was determined to be free of water and ready for use.



#### Water PPM ~ Ounce conversion:

Moisture (PPM) X Fluid volume (Gallons) X .0001279 = Ounces of Water



FILTRATION