



Cooling Tower Control & Dosing

Corrosion Monitoring via Coupon Racks (PVC & SS)

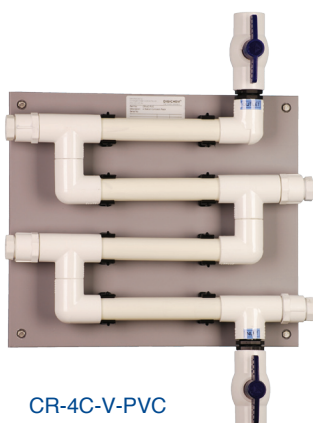
Ordering Code	Description
CR-2C-V-PVC	2 Coupon rack - opaque 20mm PVC (cold water)
CR-2C-V-CLR	2 Coupon rack - transparent 20mm PVC (cold water)
CR-2C-V-1-PVC	2 Coupon rack - opaque 25mm PVC (cold water)
CR-2C-V-SS	2 Coupon rack - 20mm Stainless Steel (hot or chilled water)
CR-4C-V-PVC	4 Coupon rack - opaque 20mm (cold water)
CR-4C-V-CLR	4 Coupon rack - transparent 20mm (cold water)
CR-4C-V-1-PVC	4 Coupon rack - opaque 25mm (cold water)
CR-4C-V-SS	4 Coupon rack - 20mm Stainless Steel (hot or chilled water)



CR-2C-V-PVC



CR-2C-V-CLR



CR-4C-V-PVC



CR-4C-V-CLR



CR-2C-1-V



CR-4C-V-1-PVC



CR-4C-V-SS



CR-2C-V-SS

Description

A Corrosion Coupon Rack is a series of pipework through which water flows, most commonly used in cooling towers, hot or chilled water circuits. Within the pipework are holders which suspend metal specimens in the centre of the flow. The objective is to have a coupon (metal specimen) of the same metal found in the system being monitored. For each different metal in the system, a separate coupon is required. The amount of corrosion occurring in the system is proportional to the weight loss of the coupons over a period of time. The pitting in the samples is also evaluated. The coupons are accessed by temporarily isolating the flow through the rack and removing the respective coupon holders.

(Note: Specifications subject to change without notice)

Features & Benefits

- Standard 2 or 4 coupon racks
- 3, 5 or 6 coupon racks available on request
- Suitable for common flat specimen sizes (eg. 80 x 13 x 1.6mm)
- Direction of water flow always from bolt & nut holding coupon to the end of the coupon itself - ensures same flow characteristics over all coupons
- Robust PVC construction for cold water circuits
- Stainless Steel (SS 316) for Hot water or Chilled water circuits
- Transparent horizontal sections on “-CLR” models for viewing the coupons during normal operation
- Isolation valves provide the facility to stop flow to remove coupons, or to regulate flow
- Optional flow meter for monitoring and/or regulating flow through coupon rack

How to Order

Ordering Code → **CR - 4C - V - 1 - PVC**

No of Coupon Holders in Rack	
2C	2 Coupon holders
4C	4 Coupon Holders

Explanation of Fixed Part Codes	
CR	Corrosion Rack
V	Supplied with Isolation valves on Inlet and Outlet

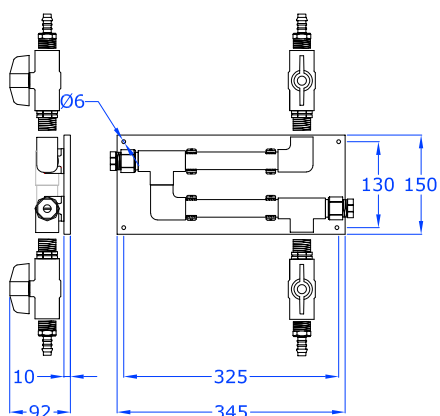
Construction of Pipework in Rack	
PVC	White Opaque PVC
CLR	Transparent PVC
SS	Stainless Steel 316

Pipe Size used in Rack Construction	
blank	20mm
1	25mm

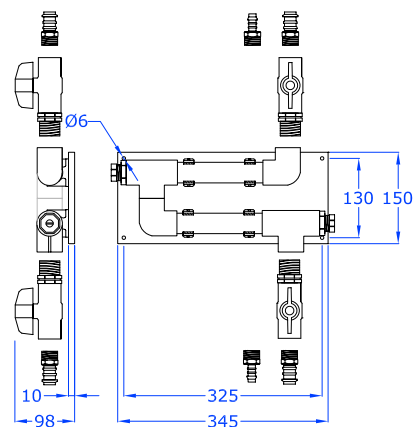
Options & Accessories

Ordering Code	Description
RV ILS-3/4-T20E	In-line Strainer, 3/4" NPTF ports, transparent Nylon bowl, 20% glass filled PP body, EPDM gasket, 20 mesh (915 micron) SS304 screen, max 6.9 bar @ 52 degC or 10.3 bar @ 21 degC, mounting in any orientation
RV ILS-1-T20E	In-line Strainer, 1" NPTF ports, transparent Nylon bowl, 20% glass filled PP body, EPDM gasket, 20 mesh (915 micron) SS304 screen, max 6.9 bar @ 52 degC or 10.3 bar @ 21 degC, mounting in any orientation
GEMU 857 25D 33 21 14 144 1600	Gemu Flowmeter, 150-1600 l/hr (ie 2.5-26.5 l/min). 1" BSPF connections. L = 250mm, 60°C, Unit must be orientated vertically
GEMU 807 32D 33 21 14 162 2500	Gemu Flowmeter, 200-2500 l/hr (ie. 3-41 l/min), 1 1/4" BSPF connections. L=408mm, 60°C, Unit must be orientated vertically
GEMU 857 25D 7 22 14 644 1600	Gemu Flowmeter, 150-1600 l/hr (ie 2.5-26.5 l/min). 1" BSPF malleable iron connections. L = 250mm, SS float, Polysulphone Tube 0-100°C, EPDM O-rings, Unit must be orientated vertically,

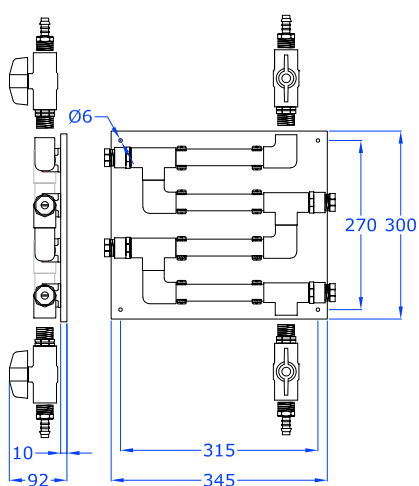
Dimensional Drawings



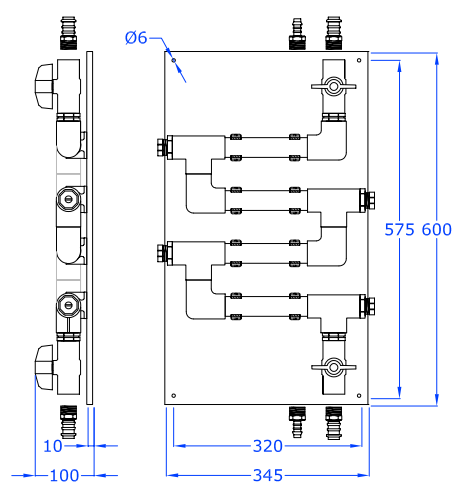
CR-2C-V-PVC
CR-2C-V-CLR



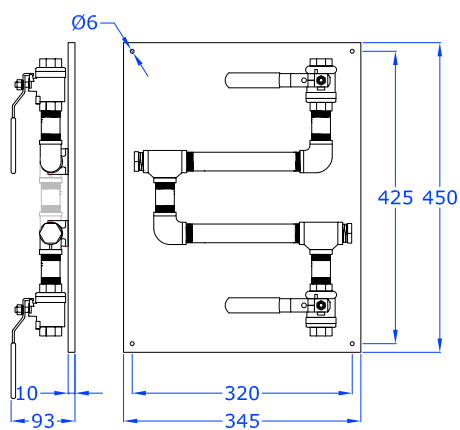
CR-2C-V-1-PVC



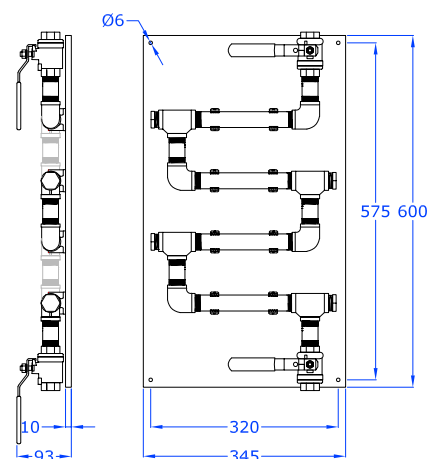
CR-4C-V-PVC
CR-4C-V-CLR



CR-4C-V-1-PVC



CR-2C-V-SS



CR-4C-SS



Recommended Spare Parts & Consumables

Ordering Code	Description
SP-CH-3/4	Spare Coupon Holder for PVC racks
SP-CHSK	10 pack spare 4mm Nylon nuts & bolts for fixing coupons to end of coupon holders (PVC racks only)
SP-CH-3/4BSPT-SS	Stainless Steel Corrosion Coupon Holder 3/4" BSPT thread, total length = 100mm, w/ 4mm SS screw (short thread approx 6mm) and hole tapped (Loctite 567 white paste recommended for sealing)

Specifications

	CR-2C-V-PVC	CR-2C-V-CLR	CR-2C-V-1-PVC	CR-2C-V-SS
Manifold				
Description	Inlet, isolation valve, 2 coupon holders, isolation valve, outlet			
Horizontal sections	20mm opaque white PVC pipe	20mm transparent PVC pipe	25mm opaque white PVC pipe	316 SS
Coupon Holders Included	2 x SP-CH-3/4	2 x SP-CH-3/4	2 x SP-CH-3/4	2 x SP-CH-3/4BSPT-SS
Metal coupons	not included			
Max pressure & temp.	750kPa (7.5bar) @ 40°C, 300kPa (3bar) @ 50°C			10 bar @ 100°C
Physical				
Materials	Rack PVC, Pipe Clips PP, Backboard PVC			Rack SS, Pipe Clips PP, Backboard PVC
Packaged dimensions	430(l) x 370(w) x 300(h) mm		430(l) x 370(w) x 300(h) mm	630(l) x 370(w) x 290(h) mm
Packaged weight	3kg	3kg	5kg	8kg

	CR-4C-V-PVC	CR-4C-V-CLR	CR-4C-V-1-PVC	CR-4C-V-SS
Manifold				
Description	Inlet, isolation valve, 4 coupon holders, isolation valve, outlet			
Horizontal sections	20mm opaque white PVC pipe	20mm transparent PVC pipe	25mm opaque white PVC pipe	316 SS
Coupon Holders Included	4 x SP-CH-3/4	4 x SP-CH-3/4	4 x SP-CH-3/4	4 x SP-CH-3/4BSPT-SS
Metal coupons	not included			
Max pressure & temp.	750kPa (7.5bar) @ 40°C, 300kPa (3bar) @ 50°C			10 bar @ 100°C
Physical				
Materials	Rack PVC, Pipe Clips PP, Backboard PVC			Rack SS, Pipe Clips PP, Backboard PVC
Packaged dimensions	430(l) x 370(w) x 300(h) mm		630(l) x 370(w) x 290(h) mm	
Packaged weight	4kg	4kg	6kg	9kg