



Product Highlight

Thermoplastic Housings with Stainless Steel Inserts

The corrosion resistant Thermoplastic Housings with Stainless Steel Inserts offer a unique solution for applications that require a clean operating environment & frequent wash downs such as food processing, packaging, or in pharmaceutical machinery; or are subject to corrosive elements such as those found in photo & film processing, dyeing & printing, textile finishing, or chemical processing machinery.

These maintenance free housings have excellent mechanical strength, stiffness & dimensional stability.



Features

- Housing constructed of high-grade PBT (see below for properties & chemical resistance)
- Stainless Steel (AISI304) Bolt Hole sleeves
- Solid base that prevents dirt from entering the bottom of housings
- Stainless Steel (AISI304) Grease Nipple
- Stainless Steel Insert (AISI440C)
- FDA Food Approved Grease (Mobil FM102)

Chemical Media	°C	Immulsion & Days	% Retention of strength
Acids			
10 % Hydrochloric	23	30	89
	23	90	85
	23	180	82
10% Sulfuric	23	30	97
	23	90	94P
	23	180	90
36% Sulfuric (battery)	23	30	97
	23	180	96
	66	30	84
10% Acetic	23	30	89
	23	180	88
Bases			
5% Potassium Hydroxide	23	30	83
	23	90	10
10% Sodium Hydroxide	23	30	2
	23	180	-
10% Ammonium Hydroxide	23	30	90
	23	90	87
	23	180	58
Organic Solvents			
Ethyl Alcohol	23	30	99
	23	180	94
Methyl Alcohol	23	30	91
	23	180	76
Isopropyl-Alcohol	23	30	100
	23	180	100
Isopropyl-Alcohol & Water (50:50)	23	30	93
	23	180	96
Turpentine	23	180	92
	23	30	66
Acetone	23	180	63

PROPERTIES	Unit	Test method	
Mechanical			
Tensile strength at yield	N/mm ²	ASTM D 638	115
at break	N/mm ²	ASTM D 638	
Elongation at yield	%	ASTM D 638	3
at break	%	ASTM D 638	-
Tensile modulus	N/mm ²	ASTM D 638	8000
Flexural yield strength	N/mm ²	ASTM D790	-
Flexural yield strength	N/mm ²	ASTM D790	170
Flexural modulus	N/mm ²	ASTM D790	7000
Notched impact strength Charpy	K/m ²	DIN 53453	12
Hardness.H358/10	N/mm ²	DIN 53456	104
	H358/60	DIN 53456	101
	Rockwell	ASTM D 785	L102
Thermal			
Oxygen index ^{''}		ADTM D 2863	19
Flame retardancy	-	UL stand 94	94HB
(1/6mm thickness) ^{''}			
Heat resistance: Vicat,methodB	°C	ASTM D 1525	210-215
Thermal conductivity	Whm ² C	ASTM C 177	0.19
Mould shrinkage flow	%	ASTM D 1299	0.4-0.6
Cross flow direction	%	ASTM D 1299	0.6-0.8
Physical			
Water absorption		ASTM D 570	
24 Hrs, 23 °C	%		0.06