

# PacFlange<sup>Ltd</sup>

Conveyor Units

Food Grade Corrosion-Free Grease-Free



Oil and grease free, self lubricating units  
for FOOD and WATER handling processes

Approvals for bush material: Complies with FDA



[www.PacFlange.com](http://www.PacFlange.com)

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## PacFlange Conveyor Units

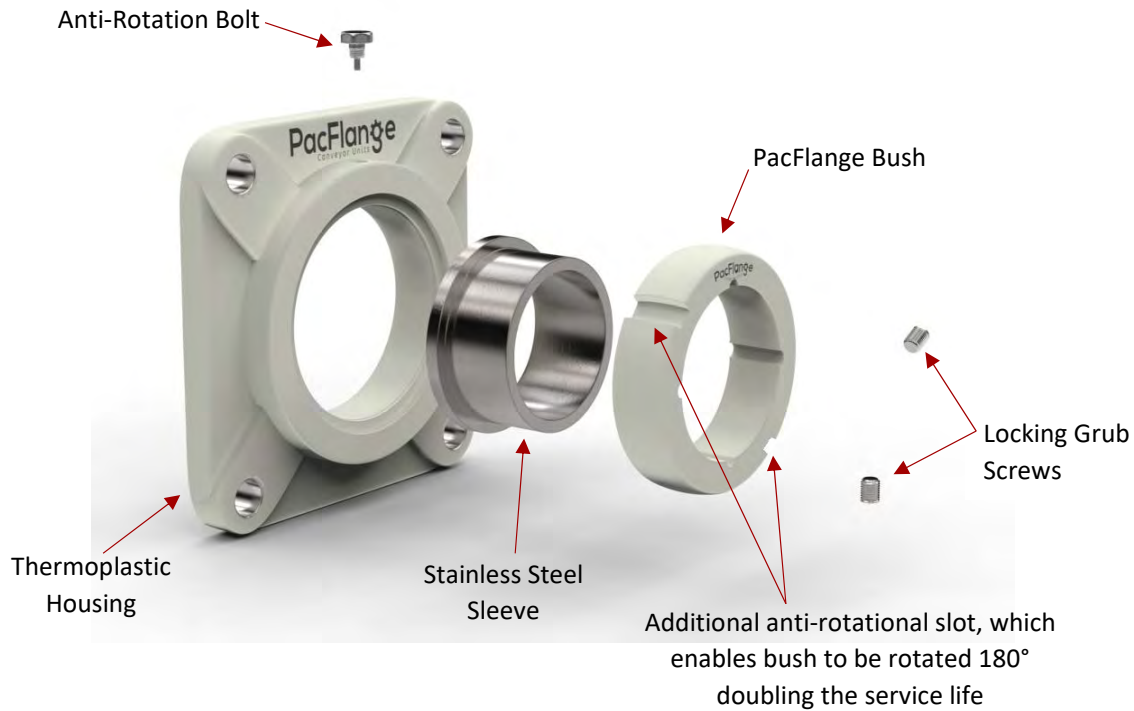
Developed for the food processing and production industry, PacFlange is designed to replace the conventional greased roller bearing thereby eliminating grease completely and providing a zero-contamination & maintenance solution. PacFlange consists of a food grade approved housing, a marine grade stainless steel sleeve (grub screwed to the shaft), which runs on a non-metallic bush. This material is an engineered food grade thermoplastic that is self-lubricating with low friction and wear properties – specifically designed for FOOD and WATER handling environments.



## Reduce Your Plants Maintenance Costs

- **Grease free** – zero costs, zero contamination risk.
- **Maintenance free** – as there is no need for grease, staff do not need to attend to each unit to apply grease periodically, freeing up their time for other maintenance tasks.
- **No catastrophic failure** – With a correct application, the PacFlange unit will wear out gradually, thus avoiding unexpected failure.
- **Planned replacement** – as there is no catastrophic failure for PacFlange units when installed within PV limits, you are able to plan well in advance when a unit is due for replacement, therefore reducing down time from unexpected unit failure.
- **Longer life** – reduced replacement of units and higher MTBF (Mean Time Between Failure)

## Exploded view of a PacFlange Conveyor Unit

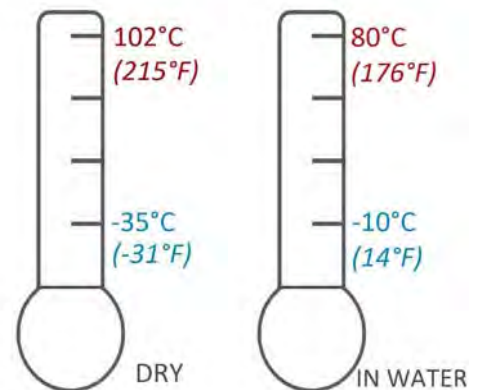


## Advantages of PacFlange

(For entire product range)

- Self-lubricating – No oil or grease required
- Cleaner operation
- Zero maintenance required
- High strength, low wear – Long bearing wear life
- Gradual wear ensures no unplanned maintenance
- Elimination of food contamination
- Quick and easy installation
- High resistance to chemicals, heat, corrosion, and abrasion
- Self-aligning – Large Pivot Angles

## Operating Temp. Range



\*Please consult PacFlange if operating above 60°C (140°F) or below -20°C (-4°F) as it may be best to supply a stainless steel housing

## SUPERIOR BUSH MATERIAL

### ThorPlas White

A homogeneous polymer bush with lubricants to lower friction and wear formulated into the molecular structure. Once the PacFlange unit enters service and a transfer film is established between the sleeve and the bush, friction then stabilises for the life of the unit. As the lubricants are evenly dispersed throughout the homogeneous material, surface wear has no adverse effect on its self-lubricating or low friction properties.



General Properties	Unit	ThorPlas White	Method
Colour		Natural White	
Density	kg/m <sup>3</sup>	1400	
Coefficient of friction		0.15-0.3	
Absorption in water	Vol %	< 0.3	ASTM D570
PV limit	MPa x m/min	7.35	
<b>Mechanical Properties</b>			
Compressive Strength	MPa	> 350	ASTM D695
Max. Operating Pressure	MPa	45	
Ultimate Tensile Strength	MPa	70	ASTM D638
Tensile Modulus of Elasticity	MPa	2770	ASTM D638
Hardness	Shore - D	83	ASTM D2240

### Low water absorption

Water absorption is 0.15% of wall thickness. It is also directly proportional to operating temperature. This allowance has been accounted for in the design.

### Pressure

The high strength and low creep of the material enables it to support high operating pressures. Maximum dynamic design pressure is 45 MPa either operating dry or lubricated by water. Peak static pressure is 60 MPa.

### Abrasive Environments

PacFlange is more abrasive resistant than the majority of metallic and non-metallic materials, but it will perform better if it has less contact with abrasives. A clean water flush or wash-down (including CIP) helps to remove any abrasives present in the bush.

### ThorPlas Approvals

- AsureQuality, Independent Quality Assurance – (NZ and Australia)
- WRAS Certification Mark (UK/Euro)
- NSF/ANSI 61 (US)
- NSF/ANSI 51 (US)
- Complies with FDA

## Product Range



4 Bolt Flange



3 Bolt Offset Flange



Pillow Block



2 Bolt Flange



Tapped Base Pillow Block



Take-Up Housing

## Ideal applications

- Areas exposed to frequent washdowns
- Wet, clean room or moist environments
- Limited access
- Abrasive environments
- Areas exposed to chemicals
- Food handling and processing



## Industries

- Dairy
- Meat and Poultry
- Aquaculture
- Food processing
- Ready to eat food packaging
- Bottling Plants
- Confectionery
- Bakery
- Horticulture



## Conveyor Types to Target

**Slow moving** – most conveyors transporting product would be operating at around 20-30 RPM, this is the ideal speed for a PacFlange unit, we can supply higher RPM if the load is lower but it is important to note that a greased rolling element bearing will be able to withstand more load. It is very important that care is taken when reviewing a potential application.

**Modular Belts** – Modular belts are perfect as they are generally fitted loose between each roller.

**Wet Environment Conveyors** – PacFlange works best in wet environments and can actually withstand more load in the presence of water. Conveyors which are regularly washed down with high pressure and chemicals (CIP Process) are ideal. If a constant feed of cooling water is supplied to the PacFlange unit then the load rating significantly increases, please contact us for further information.



## What to watch out for

- **Tension Belts** – the installer needs to be aware not to over tighten the tension belt as this could exceed the dynamic load limitations of the PacFlange unit.
- **Alignment** – very important with PacFlange (more so than greased rolling element). Best to reset/mount the drive motor after bearings and shaft has been installed.
- **Torque Arms**– caution needs to be taken when drive motors are mounted with torque arms as this arrangement transmits pressure direct to the shaft bearings.

## Installation



Read installation instructions & precautions  
 PacFlange.com

Please ensure you read the installation instructions before installing a PacFlange Unit. Our bearings are quite different to a standard greased roller bearing and a few precautions need to be taken into account.

For an application review please contact your local dealer or [sales@pacflange.com](mailto:sales@pacflange.com)

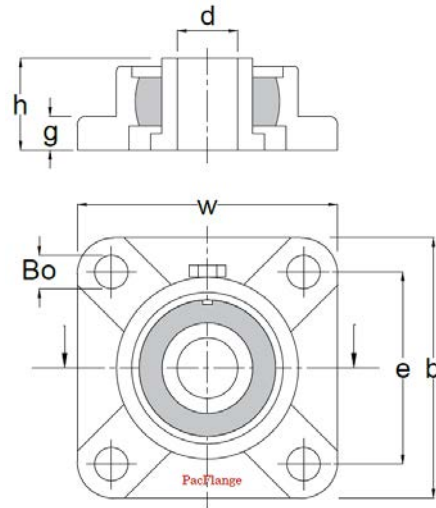
## Stainless Steel Option



On request, we can supply stainless steel (304) housings at an additional cost.

## 4 Bolt Flange

PacFlange Conveyor Unit With 4 Mounting Holes



### Standard Range – Thermoplastic Housing (mm)

Shaft dia. (d)		Stock Code		Housing Number	w	b	h	e	g	Bo	Max. Static Radial Load		
mm	inch	Metric	Imperial		Width	Breadth	Total Height	Hole Pitch	Flange Height	Bolt Size	N (Long Term)	Kg (Long Term)	
20		PAC020F204		F204	86	86	31	63.5	13.4	M10	5125	522	
		3/4											PAC075F204
25		PAC025F205		F205	95	95	34.1	70	14	M10	6075	619	
		1											PAC100F205
30		PAC030F206		F206	108	108	38.1	83	14.3	M10	8850	902	
		1 1/8											PAC1125F206
		1 1/4											PAC125F206
35		PAC035F207		F207	118	118	42.9	92	15.5	M12	9250	943	
		1 1/4											PAC125F207
		1 3/8											PAC1375F207

### Custom Range – Thermoplastic Housing (mm)

Shaft dia. (d)		Stock Code		Housing Number	w	b	h	e	g	Bo	Max. Static Radial Load	
mm	inch	Metric	Imperial		Width	Breadth	Total Height	Hole Pitch	Flange Height	Bolt Size	N (Long Term)	Kg (Long Term)
40		PAC040F208		F208	130	130	49.2	102	18	M12	9625	981
		1 1/2										
45		PAC045F209		F209	137	137	49.2	105	19	M16	9675	986
		1 3/4										
50		PAC050F210		F210	143	143	51.6	111	21	M16	9825	1002
		2										
55		PAC055F211		F211	162	162	55.6	130	20	M16	10750	1096
		2										
60		PAC060F212		F212	175	175	65.1	143	19	M16	10950	1116
		2 1/4										

### Custom Range – Cast Iron Housing (mm)

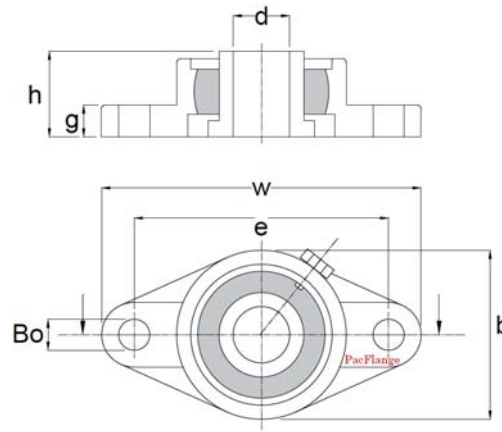
Shaft dia. (d)		Stock Code		Housing Number	w	b	h	e	g	Bo	Max. Static Radial Load	
mm	inch	Metric	Imperial		Width	Breadth	Total Height	Hole Pitch	Flange Height	Bolt Size	N (Long Term)	Kg (Long Term)
65		PAC065F213		F213	187	187	69.7	149	22	M16	25000	2548
		2 1/2,										
70		PAC070F214		F214	193	193	75.4	152	22	M16	31250	3186
		2 1/2										
75		PAC075F215		F215	200	200	78.5	159	22	M16	35000	3568
		3										

\*Refer to page 12 for Dynamic Load



## 2 Bolt Flange

PacFlange Conveyor Unit With 2 Mounting Holes



### Standard Range – Thermoplastic Housing (mm)

Shaft dia. (d)		Stock Code		Housing Number	w	b	h	e	g	Bo	Max. Static Radial Load	
mm	inch	Metric	Imperial		Width	Breadth	Total Height	Hole Pitch	Flange Height	Bolt Size	N (Long Term)	Kg (Long Term)
20		PAC020FL204		FL204	113	65	31	90	14	M10	5295	540
	3/4		PAC075FL204									
25		PAC025FL205		FL205	131	69	34.1	99	14	M10	7546	769
	1		PAC100FL205									
30		PAC030FL206		FL206	148	80	38.1	117	14	M10	8413	858
	1 1/8		PAC1125FL206									
	1 1/4		PAC125FL206									
35		PAC035FL207		FL207	166	92	42.9	130	16	M12	7450	759
	1 1/4		PAC125FL207									
	1 3/8		PAC1375FL207									

### Custom Range – Thermoplastic Housing (mm)

Shaft dia. (d)		Stock Code		Housing Number	w	b	h	e	g	Bo	Max. Static Radial Load	
mm	inch	Metric	Imperial		Width	Breadth	Total Height	Hole Pitch	Flange Height	Bolt Size	N (Long Term)	Kg (Long Term)
40		PAC040FL208		FL208	176	101	49.2	144	20	M12	7575	772
	1 1/2		PAC150FL208									
45		PAC045FL209		FL209	189	108	49.2	148.5	21	M16	7675	782
	1 3/4		PAC175FL209									
50		PAC050FL210		FL210	197	116	51.6	157	21	M16	7825	798
	2		PAC200FL210									
55		PAC055FL211		FL211	224	130	55.6	184	20	M16	7950	810
	2		PAC200FL211									
60		PAC060FL212		FL212	250	140	65.1	202	20	M16	8125	828

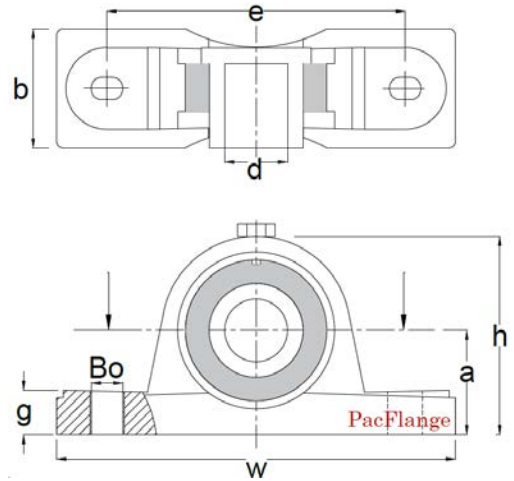
### Custom Range – Cast Iron Housing (mm)

Shaft dia. (d)		Stock Code		Housing Number	w	b	h	e	g	Bo	Max. Static Radial Load	
mm	inch	Metric	Imperial		Width	Breadth	Total Height	Hole Pitch	Flange Height	Bolt Size	N (Long Term)	Kg (Long Term)
65		PAC065FL213		FL213	258	155	69.7	210	22	M20	22500	2294
	2 1/2,		PAC250FL213									
70		PAC070FL214		FL214	265	160	75.4	216	22	M20	25000	2548
	2 1/2		PAC250FL214									
75		PAC075FL215		FL215	275	165	78.5	225	22	M20	28750	2931
	3		PAC300FL215									

\*Refer to page 12 for Dynamic Load

## Pillow Block

PacFlange Conveyor Unit With 2 Mounting Holes



### Standard Range – Thermoplastic Housing (mm)

Shaft dia. (d)		Stock Code		Housing Number	w Width	b Breadth	h Total Height	e Hole pitch	a Centre	g Flange Height	Bo Bolt Size	Max. Static Radial Load		
mm	inch	Metric	Imperial									N (Long Term)	Kg (Long Term)	
20		PAC020P204		P204	127	38	31	95	33.3	15	M10	3850	392	
		3/4												PAC075P204
25		PAC025P205		P205	140	38	34.1	105	36.5	16	M10	5000	510	
		1												PAC100P205
30		PAC030P206		P206	163	46	38.1	119	42.9	18	M12	5300	540	
		1 1/8												PAC1125P206
		1 1/4												PAC125P206
35		PAC035P207		P207	168	48	42.9	127	47.6	18	M12	6375	650	
		1 1/4												PAC125P207
		1 3/8												PAC1375P207

### Custom Range – Thermoplastic Housing (mm)

Shaft dia. (d)		Stock Code		Housing Number	w Width	b Breadth	h Total Height	e Hole Pitch	a Centre	g Flange Height	Bo Bolt Size	Max. Static Radial Load	
mm	inch	Metric	Imperial									N (Long Term)	Kg (Long Term)
40		PAC040P208		P208	184	54	49.2	137	49.2	19.5	M12	5550	566
		1 1/2											
45		PAC045P209		P209	192	54	49.2	146	54	23	M16	5700	581
		1 3/4											
50		PAC050P210		P210	206	60	51.6	159	57.2	24	M16	5875	599
		2											
55		PAC055P211		P211	217	60	55.6	172	63.5	22	M16	6225	635
		2											
60		PAC060P212		P212	238	66	65.1	186	69.9	24	M16	6555	668
		2 1/4											

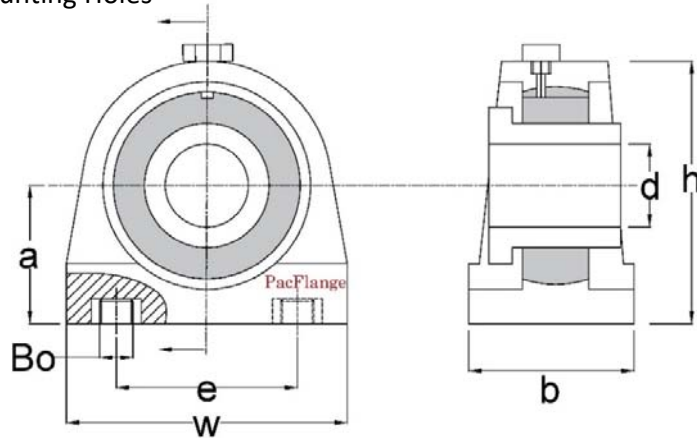
### Custom Range – Cast Iron Housing (mm)

Shaft dia. (d)		Stock Code		Housing Number	w Width	b Breadth	h Total Height	e Hole Pitch	a Centre	g Flange Height	Bo Bolt Size	Max. Static Radial Load	
mm	inch	Metric	Imperial									N (Long Term)	Kg (Long Term)
65		PAC065P213		P213	262	70	149	203	76.2	26	M20	12500	1274
		2 1/2											
70		PAC070P214		P214	266	72	155	210	79.4	27	M20	16000	1631
		2 1/2											
75		PAC075P215		P215	274	74	162	217	82.6	28	M20	20000	2039
		3											

\*Refer to page 12 for Dynamic Load

## Tapped Base Pillow Block

PacFlange Conveyor Unit With 2 Tapped Base Mounting Holes



### Standard Range – Thermoplastic Housing (mm)

Shaft dia. (d)		Stock Code		Housing Number	w	b	h	e	a	g	Bo	Max. Static Radial Load		
mm	inch	Metric	Imperial		Width	Breadth	Total Height	Hole Pitch	Centre	Flange Height	Bolt Size	N (Long Term)	Kg (Long Term)	
20		PAC020PA204		PA204	76	38	64	52	33.3	13	M8	3450	352	
		3/4												PAC075PA204
25		PAC025PA205		PA205	84	38	72	56	36.5	14	M10	3505	357	
		1												PAC100PA205
30		PAC030PA206		PA206	95	48	84	66	42.9	16	M10	3290	335	
		1 1/8												PAC1125PA206
		1 1/4												PAC125PA206
35		PAC035PA207		PA207	110	48	95	80	47.6	18	M10	4040	412	
		1 1/4												PAC125PA207
		1 3/8												PAC1375PA207

### Custom Range – Thermoplastic Housing (mm)

Shaft dia. (d)		Stock Code		Housing Number	w	b	h	e	a	g	Bo	Max. Static Radial Load	
mm	inch	Metric	Imperial		Width	Breadth	Total Height	Hole Pitch	Centre	Flange Height	Bolt Size	N (Long Term)	Kg (Long Term)
40		PAC040PA208		PA208	116	54	100	84	49.2	18	M12	4550	464
		1 1/2											
45		PAC045PA209		PA209	120	54	108	90	54.2	20	M12	5200	530
		1 3/4											
50		PAC050PA210		PA210	130	60	116	94	57.2	21	M16	5525	563
		2											

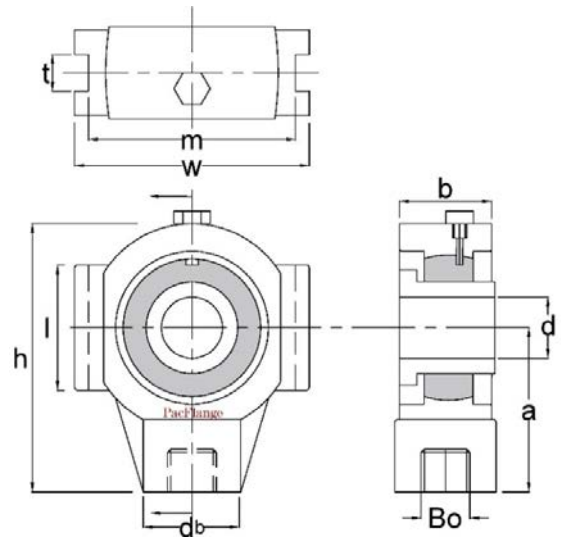
### Custom Range – Cast Iron Housing (mm)

Shaft dia. (d)		Stock Code		Housing Number	w	b	h	e	a	g	Bo	Max. Static Radial Load	
mm	inch	Metric	Imperial		Width	Breadth	Total Height	Hole Pitch	Centre	Flange Height	Bolt Size	N (Long Term)	Kg (Long Term)
55		PAC055PA211		PA211	140	66	125	104	63.5	14	M16	22500	2294
		2											
60		PAC060PA212		PA212	150	68	138	114	69.9	17	M16	24000	2446
		2 1/4											

\*Refer to page 12 for Dynamic Load

## Take-up Housing

PacFlange Conveyor Unit With 1 Tapped Mounting Hole



### Standard Range – Thermoplastic Housing (mm)

Shaft dia. (d)		Stock Code		Housing Number	w	b	h						Bo	Max. Static Radial Load		
mm	inch	Metric	Imperial		Width	Breadth	Height	a	db	l	t	m	Bolt Size	N (Long Term)	Kg (Long Term)	
20		PAC020T204		T204	88	27.5	99	64	36	47	12	76	M16	3930	401	
		3/4														PAC075T204
25		PAC025T205		T205	88	27.5	99	64	36	47	12	76	M16	4530	462	
		1														PAC100T205
30		PAC030T206		T206	102	34.5	125	76	40	63	12	89	M16	5100	520	
		1 1/8														PAC1125T206
		1 1/4														PAC125T206
35		PAC035T207		T207	102	34.5	125	76	40	63	12	89	M16	6500	663	
		1 1/4														PAC125T207
		1 3/8														PAC1375T207

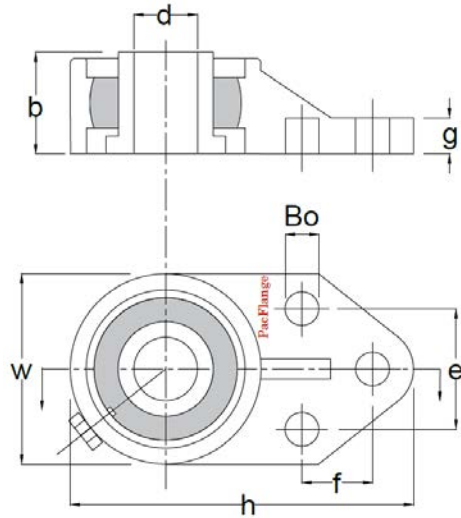
### Custom Range – Thermoplastic Housing (mm)

Shaft dia. (d)		Stock Code		Housing Number	w	b	h						Bo	Max. Static Radial Load	
mm	inch	Metric	Imperial		Width	Breadth	Height	a	db	l	t	m	Bolt Size	N (Long Term)	Kg (Long Term)
40		PAC040T208		T208	114	34.5	140	85	40	80	16	102	M16	7800	795
		1 1/2													
45		PAC045T209		T209	116	40	149	90	50	85	16	102	M20	8710	888
		1 3/4													
50		PAC050T210		T210	116	40	149	90	50	85	16	102	M20	9750	994
		2													

\*Refer to page 12 for Dynamic Load

## 3 Bolt Offset Flange

PacFlange Conveyor Unit With 3 Mounting Holes



### Standard Range – Thermoplastic Housing (mm)

Shaft dia. (d)		Stock Code		Housing Number	w	b	h	e	f	g	Bo	Max. Static Radial Load		
mm	inch	Metric	Imperial		Width	Breadth	Total Height	Hole Pitch	Hole Pitch	Flange Height	Bolt Size	N (Long Term)	Kg (Long Term)	
20		PAC020FK204		FK204	63	38	108	38.1	22.2	11.4	M10	3600	367	
		3/4												PAC075FK204
25		PAC025FK205		FK205	70	41.1	121	41.3	28.6	12.3	M10	4550	464	
		1												PAC100FK205
30		PAC030FK206		FK206	83	47.6	139	47.6	31.8	14.5	M10	6100	622	
		1 1/8												PAC1125FK206
		1 1/4												PAC125FK206
35		PAC035FK207		FK207	94	50.8	158	50.8	31.8	17	M12	6450	657	
		1 1/4												PAC125FK207
		1 3/8												PAC1375FK207

### Custom Range – Thermoplastic Housing (mm)

Shaft dia. (d)		Stock Code		Housing Number	w	b	h	e	f	g	Bo	Max. Static Radial Load	
mm	inch	Metric	Imperial		Width	Breadth	Total Height	Hole Pitch	Hole Pitch	Flange Height	Bolt Size	N (Long Term)	Kg (Long Term)
40		PAC040FK208		FK208	103	54	178	54	35.5	18.5	M12	6800	693
		1 1/2											

\*Refer to page 12 for Dynamic Load

## Dynamic Load Ratings

The below tables show how much load can be directly applied on one bearing at various shaft speeds. As one shaft has two bearings, the applied load can be twice the given value below for a particular RPM. If the shaft size is unknown, use the housing size to find the load at the specific rpm.

Shaft dia. (d)		Housing size	10 RPM		20 RPM		30 RPM		40 RPM		50 RPM		60 RPM	
mm	inch		Kg	N	Kg	N	Kg	N	Kg	N	Kg	N	Kg	N
20	3/4	204	218	2141	113	1106	74	728	55	539	44	432	37	367
25	1	205	246	2416	123	1208	84	820	62	610	50	485	40	388
30	1 1/8 1 1/4	206	267	2621	130	1278	87	858	65	636	52	512	43	426
35	1 1/4 1 3/8	207	276	2708	138	1354	92	901	69	674	55	539	46	448
40	1 1/2	208	298	2923	152	1489	100	982	75	734	60	588	50	491
45	1 3/4	209	318	3118	156	1532	105	1025	79	771	63	615	52	512
50	2	210	319	3128	157	1537	105	1030	79	771	63	615	52	512
55	2	211	355	3484	178	1742	118	1160	88	863	70	690	59	577
60	2 1/4	212	370	3625	182	1785	122	1192	92	901	73	717	61	599
65	2 1/2	213	380	3722	190	1861	127	1241	95	928	76	744	63	620
70	2 1/2	214	389	3819	197	1931	130	1278	98	960	79	771	65	642
75	3	215	408	3997	204	1996	135	1321	101	992	81	793	67	658

**\*Applications with shaft speeds over 60 RPM need to be reviewed by PacFlange Engineering, please contact your local dealer or email us at [sales@pacflange.com](mailto:sales@pacflange.com)**

## ThorPlas White Chemical Resistance Chart

Chemical/Fluid	Resistance	Chemical/Fluid	Resistance
<b>Salt solutions</b>	<b>A</b>	<b>Hydrocarbon/fuels</b>	<b>A</b>
Ammonium chloride	A	Aromatic hydrocarbons	A
Calcium chloride	A	Benzene	A
Cupric chloride	A	Toluene	A
Magnesium chloride	A	Xylene	A
Potassium chloride	A	Aliphatic –	
Sodium chloride	A	gasoline, grease	A
<b>Weak Acids</b>	<b>A-B</b>	Lubricating oils	
Acetic acid	B	(petroleum)	A
Benzoic acid	A	Liquid propane gas	A
Boric acid	A	<b>Chlorinated Solvents</b>	C-D
Carbonic acid	A	Ethylene Chloride	C
Chromic acid	A	Chloroform	D
Citric acid	A	<b>Alcohols</b>	A
Formic acid, 3%	B	Ethanol	A
Lactic acid	A	Methanol	A
<b>Strong Acids</b>	<b>A-C</b>	Isopropyl alcohol	A
Hydrochloric, 10%	C	<b>Ketones</b>	A-B
Nitric acid, 0.1%	C	Methyl ethyl ketone	A
Phosphoric acid, 3%	A	Acetone	B
Sulphuric, 5%	A	<b>Ethers</b>	A
Sulphuric, concentrated	C	Diethyl ether	A
<b>Weak Bases</b>	<b>A-B</b>	Isopropyl ether	A
Ammonia 10% Aq.	A	<b>Esters</b>	A
Magnesium hydroxide, 10%	B	Ethyl acetate	A
Potassium carbonate	A	Methyl acetate	A
Sodium carbonate	A	<b>Freon 12</b>	A
Triethanolamine	B	<b>Detergents, Organic</b>	A
<b>Strong Bases</b>	<b>C</b>	<b>Castor oil</b>	A
Potassium hydroxide, 10%	C	<b>Silicone fluids</b>	A
Sodium hydroxide, 10%	C	<b>Vegetable Oils</b>	A
<b>Oxidizing agents</b>	<b>A</b>		
Hydrogen peroxide, 1-3%	A		
Chromic acid A C	A		

A: Excellent-No Effect    B: Good-Little Effect    C: Fair-Moderate Effect    D: Unacceptable

**\*We have great results with daily chemical wash downs using Caustic Soda (Sodium Hydroxide) PacFlange units perform well in these conditions.**

## Client Testimonials & Examples

Industry: Meat      Date of Installation: July 2015  
 Plant: **Silverfern, Hawera**

*"We installed two x trial PacFlange units back in July 2015, they performed very well and 2 months later we ordered a further 22 PacFlange units to replace our harder to get to greased rolling element bearings. These have **reduced our maintenance expenditure for the plant, saving money on grease and time** and they are still in operation (maintenance free) to date, where the greased rolling element bearings were replaced yearly. The old bearings were being greased weekly which we now do not have to do. Our plant operates 16hrs/day – 5days/week with daily chemical wash downs which these PacFlange Units handle superbly."*

Dan Mapp - Engineering Supervisor, March 2017



Industry: Meat      Date of Installation: Early 2017  
 Plant: **Alliance, Levin**

*"We installed these in our dip tank which runs a conveyor through showered 82 deg water, although PacFlange units aren't in direct contact with the hot water, so far so good, no sign of failure so am impressed with product."*

Shaun Morath – Maintenance Manager, Oct 2018

Industry: Seafood  
 Date of Installation: Feb 2016  
 Plant: **Moana, Auckland**

*"Running almost every day since installation, brilliantly, no issues"*

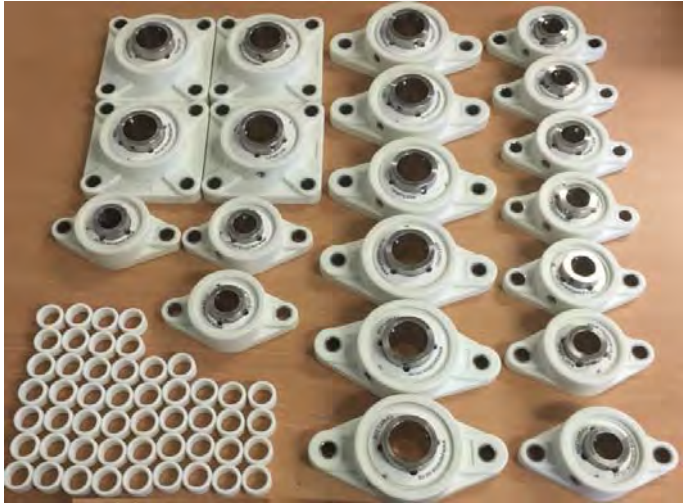
Mark, Plant Manager, Feb 2017



Industry: Meat  
 Date of Installation: August 2016  
 Plant: **ANZCO, Blenheim**

*"The PacFlange Units you supplied are in use and as time goes on through our production season we will be able to assess how well they perform in our environment, to date they appear to be working well."*

Peter Hadfield  
 Engineering Supervisor, Feb 2017



Industry: Pet Food  
 Date of Installation: July 2015  
 Plant: **Ovation, Waipukurau**

*"Installed in a hard to reach location (forklift access to grease) & haven't touched since. Still in operation with zero maintenance"*

Andrew Smith  
 Maintenance Manager, Feb 2017

Industry: Meat Date of Installation: July 2015  
 Plant: **Silverfern, Takapau**

*"We installed these in our dip tank which runs a conveyor through showered 82 deg water, although PacFlange units aren't in direct contact with the hot water, so far so good, no sign of failure so am impressed with product."*

Mike Isaacson  
 Plant Engineer, Feb 2017

**Installed and operating in:**



## Terms & Conditions of Trade

**(a) Basic Terms.** PacFlange provides a limited warranty on the Goods of its own manufacture sold by it to the Buyer thereof, against defects of material and workmanship (the "Limited Warranty").

**(b) Coverage.** This Limited Warranty covers the repair or replacement or the refund of the purchase price, as PacFlange may elect, of any defective products regarding which, upon discovery of the defect, the buyer has given immediate written notice. PacFlange does NOT warrant the merchant ability of its product and does NOT make any warranty express or implied other than the warranty contained herein.

**(c) Third Party Products.** Accessories, equipment and parts not manufactured by PacFlange are warranted or otherwise guaranteed only to the extent and in the manner warranted or guaranteed to PacFlange by the actual manufacturer, and then only to the extent PacFlange is able to enforce such warranty or guarantee.

**(d) Limited Liability.** PacFlange's liability for any and all claims, damages, losses and injuries arising out of or relating to its performance or breach of any contract of sale of goods and the manufacture, sale delivery, re-sale, repair, or use of any goods, shall NOT exceed the agreed price of such Goods. The Buyer's remedy shall be at PacFlange's option, the replacement or repair of the Goods. This shall be the buyer's sole, exclusive and only remedy against PacFlange. IN NO EVENT SHALL PACFLANGE BE LIABLE FOR INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES, INCLUDING BUT NOT LIMITED TO LOSS OF PROFITS, BUSINESS, GOODWILL, INCURRING OF MACHINERY DOWNTIME, DESTRUCTION OR LOSS OF ANY CAPITAL GOODS, LIABILITY FOR PERSONAL INJURY, DEATH, PROPERTY DAMAGE AND ANY OTHER TYPE OF DAMAGES WHETHER SIMILAR TO OR DIFFERENT FROM THIS LISTING.

**(e) Latent Defects.** In cases of defects in materials or workmanship or defects arising from the selection of material or processes of manufacturer, such defects must be apparent in the Goods within three (3) months, after delivery and acceptance of the Goods to the Buyer.

**(f) Exclusions.** PacFlange shall, as to each aforesaid defect, be relieved of all obligations and liability under this Limited Warranty if:

**1.** The Goods are operated with any accessory, equipment or part not specifically approved by PacFlange and not manufactured by PacFlange or

to PacFlange's design and specifications, unless the Buyer furnishes reasonable evidence that such installation was not a cause of the defect; provided, that this provision shall not apply to any accessory, equipment or part, the use of which does not affect the safety of the Goods;

**2.** The Goods shall not be operated or maintained in accordance with PacFlange's written instructions as delivered to the Buyer, at any time or from time to time, unless the Buyer furnishes reasonable evidence that such operation or maintenance was not a cause of the defect;

**3.** The Goods shall not be operated or maintained under normal industry use, unless the Buyer furnishes reasonable evidence that such operation was not a cause of the defect;

**4.** The Goods shall have been repaired, altered or Modified without PacFlange's written approval or, if the goods shall have been operated subsequent to its involvement in an accident or breakdown, unless the Buyer furnishes reasonable evidence that such repair, alteration, modification, operation, accident or breakdown was not a cause of the defect; provided, however, that this limitation insofar as it relates to repairs, accidents and breakdowns, shall NOT be applicable to routine repairs or replacements or minor accidents or minor breakdowns which normally occur in the operation of a machine, if such repairs or replacements are made with suitable materials and according to standard practice and engineering;

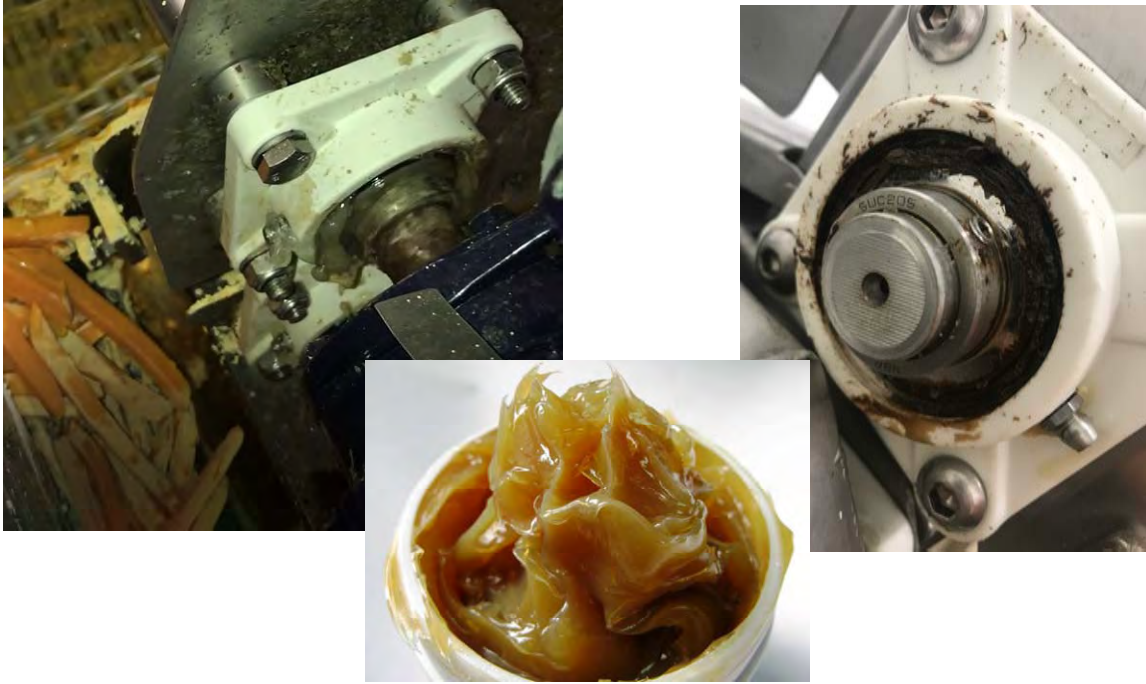
**5.** The Buyer does not submit reasonable proof to PacFlange that the defect is due to a material embraced within PacFlange's Limited Warranty hereunder.

**(g) Warranty Term.** This Limited Warranty made by PacFlange contained in these Terms and Conditions, or contained in any document given in order to carry out the transactions contemplated hereby, shall continue in full force and effect for the benefit of the Buyer, save and except, no warranty claim may be made or brought by the Buyer after the date which is twelve (12) months following delivery and acceptance of the Goods pursuant to this Contract.

**(h) Expiration and Release.** After the expiration of this Limited Warranty's period of time, as aforesaid, PacFlange shall be released from all obligations and liabilities in respect of such warranty made by PacFlange and contained in this Contract or in any document given in order to carry out the transactions contemplated hereby.

**Eliminate Grease**  
**Eliminate Risk of Contamination**

**Eliminate Labour / Maintenance**  
**Eliminate Unexpected Catastrophic Failures**



**Switch to a cleaner operation with PacFlange**



# PacFlange<sup>Ltd</sup>

Conveyor Units

Food Grade Corrosion-Free Grease-Free



**Our Environmentally Friendly Solution**

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