



Bearing Technical Catalogue '17



At Dyno we make the world of business go round.

Up and down.

And side to side.

Our conveyors make moving meat, veges, fruit, packages, gravel, and even luge sleds simple and efficient.

We can customise to meet your needs and all our designs are proprietary.

It all sounds new and high-tech, and it is.

But in reality we're an inter-generational

Kiwi company which has been designing and building conveyors

for over two decades now.

All that experience, and our knowledge of the industries we work with, is part of a total approach that includes supplying parts, and maintenance by trained engineers.



DYNO Conveyors warranties equipment supplied free from defective materials and workmanship for a period of 5 years, subject to satisfactory care and maintenance and being used according to original specifications.



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DESIGN CONSIDERATIONS

Details Required:

•	Type of product being conveyed
•	Length of product
•	Width of product
•	Height of product
•	Weight of product
•	Speed required
•	Environmental conditions

Rollers

A minimum of three rollers are required under the load at all times, products with uneven bases require more.

Ideal roller length is - load width + 50mm. This is a critical minimum with some types of plastic crates, but is of lesser importance with flat bottomed cartons.

Pallets usually flex under load causing only 1/3 of the rollers to carry the load, always allow for this.

Tapered rollers guarantee correct movement on bends.

Precision bearing rollers run smoothly at higher speeds for long periods but can have a greater resistance for manual movement.

Advantages of Plastic Rollers

- Light weight
- · Noise dampening
- · Resistance to corrosion
- · Cleanliness

Temperature range of all our standard plastics is 5° C to 40° C, although they can be used down to -20° C with lowered impact resistance, or up to 60° C with reduced load.

Dynopipe is extra special high impact resistant PVC.

Shafts

Spring loaded shafts are the simplest design, giving quick and easy assembly and maintenance.

Male and female threaded shafts give higher load capacity and reduced vibration as they are secured direct to the conveyor frame. Female threads have the advantage of very simple assembly.

Spring loaded shafts are standard on most rollers. Female threads are most common on driven rollers. Large diameter rollers often have a fixed shaft.

Many other options are available to special order.

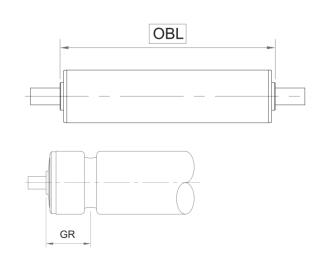
Remember - Gravity works for free

Roller Bearings

- 1. Tube Outside Diameter in nearest mm
- 2. Bearing type
 - 0 = Bush
 - 1 = Thermoplastic race, carbon steel balls
 - 2 = Thermoplastic race, stainless steel balls
 - 3 = Steel (unground)
 - 4 = Steel (unground), thermoplastic housing
 - 5 = Precision bearing, zinc plated steel housing and bush
 - 6 = Precision bearing, zinc plated steel housing, thermoplastic bush
 - 7 = Precision bearing, thermoplastic housing and bush. Press fit
 - 8 = Precision bearing, thermoplastic housing and bush. Swage fit
 - 9 = Fixed, for example = drums
- 3. Bearing details
 - A = Antistatic
 - B = Blind
 - C = Caged balls
 - G = Greased (extra)
 - HD = Heavy duty
 - M = Machined
 - SE = Sealed (extra)
 - SS = Stainless steel precision bearing
 - T = Includes locater for tapered elements
- 4. Shaft size + detail
 - H = Hexagonal across flats dimension
 - Q = Ø10mm with 8mm across flats
- 5. Extras
 - Z = Chain sprocket
 - ZB = Toothed belt sprocket
 - 14 = Number of teeth
 - S = Single
 - D = Double
 - F = Fixed
 - L = Loose

ROLLER BEARINGS

- 1. Tube Outside Diameter in nearest mm.
- 2. Bearing type, (as per Roller Bearing part number description).
- 3. Bearing details, (as per Roller Bearing part number description).
- 4. Shaft size + detail, (as per Roller Bearing part number description). Standard Shaft: 15mm out each end
- 5. Extras, (as per Roller Bearing part number description).
- 6. Tube material + (wall thickness when ordering non-standard wall thickness rollers)
 - AL = Aluminium.
 - D = Dynopipe.
 - G = Galvanised steel.
 - R = Rubber coated.
 - P = Plastic.
 - N = Stainless steel.
 - B = Black
- 7. Shaft material
 - AL = Aluminium.
 - MS = Mild steel.
 - SS = Stainless steel.
 - ZP = Mild steel zinc plated
- 8. Type of shaft
 - DL = Cross drilled.
 - F = Fixed.
 - FL = Flats.
 - FT = Female threads.
 - MT = Male threads.
 - SP = Sprung
 - P = Loose
- 9. Length of roller
 - IF = Inside frame.
 - OBL = Over bearing length.
- 10. Extras
 - T = Taper.
 - GR = Grooves + spacing from over bearing, e.g.
 - SL = Non standard shaft length and details.



Measured from outside of bearing to centre of groove

Tube Outside Diameter	
Ø20	
Ø25	
Ø32	
Ø38	
Ø42	
Ø48	
Ø50	
Ø51	
Ø60	
Ø76	
Ø89	
Ø114	
Other	

Tube M	laterial
Plastic	
Dynopipe	
Galv. steel	
Stainless steel	

Tube Wall Thickness	
Standard	
Heavy duty	
Other	

Shaf	t Size
Ø6	
Ø8	
8mm Hex	
Ø9.5	
Ø10	
10Q (Al)	
Ø11	
11mm Hex	
Ø12	
Ø12.7	
Ø15	
Ø16	
16mm Hex	
Ø17	
Ø19	
Ø20	
Ø25	
Other	

Shaft Material	
Mild steel	
Stainless steel	
Aluminium	
Other	

Cross	Drilled
One end	
Both ends	
Hole size	
Distance from end	

Fl	ats
One end	
Both ends	
Length of flats	mm
Across flats	mm

Threads	
Female threads	
Male threads	
One end	
Both ends	
Thread size	
Thread depth	mm

Bushed
Plastic race, carbon steel balls
Plastic race, S/S balls
Steel (unground)
Steel (precision)
Plastic housing (precision)
Stainless steel (precision)

Shaft Details	
Loose	
Spring loaded	
Fixed	

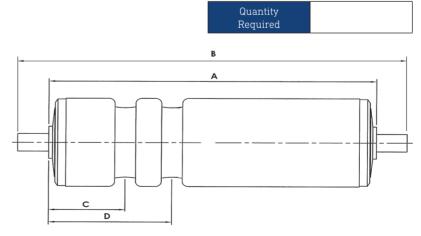
Bearing Extras									
Antistatic									
Blind									
Greased									
Sealed									

Ext	ras
Tapers	
Details	
Grooves	
Position No. 1 (C)	
Position No. 2 (D)	
Sprockets	
Single	
Double	
Fixed	
Loose	
Rubber coating	
Other	

Roller Length (mm)							
Inside frame (IF)							
Over bearing length (OBL) (A)							
Non standard shaft length (B)							

Standard Spring Loaded shaft lengths

- Ø6mm = OBL + 25mm • Ø8 - Ø15mm = OBL + 30mm
- Ø16mm plus = OBL + 40mm



ORDER DETAILS - GRAVITY ROLLER CONVEYOR

Frame Material	
Steel (powder coated)	
Steel (zinc rich primer, powder coated)	
Steel (hot dip galvanised)	
Stainless steel	

	Frame Dimensions	
	2400mm	
Inside frame size Length	1200mm	
Size Length	600mm	

Roller pitch	
32mm	
64mm	
96mm (most popular)	
128mm	
160mm	
192mm	
224mm	

Roller size and type

Shaft size and type

Extras								
Guide rails	Details							
Guide faits	Quantity							
Bends	Details							
Bends	Quantity							
Gates	Details							
Gates	Quantity							
Others	Details							
others	Quantity							

Stand Details	
Stand material (if different to frame)	
Roller height from floor (TOR)	
Stand Type - Henley Top	
Foot Type - Ajustafoot (see pg 63)	
Foot Type - Unistrut (see pg 63)	

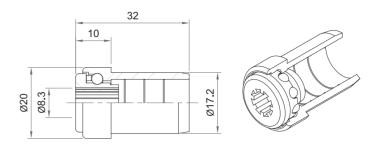
Sketch																				

202-6 Ball Bearing

- Load capacity 5kg.
- · Grey polypropylene inner and outer race.
- Stainless steel balls caged as standard.
- Suits:
 - 20 x 1.5 tube

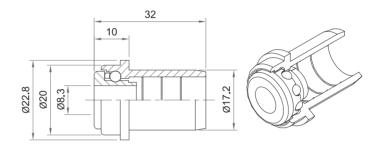
- Aluminium

- PVC
- S/S
- Option; 8mm bore, Grey 202-8



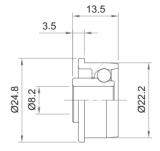
202T-8 Ball Bearing

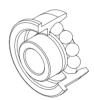
Same as 202-8 with extra flange on head to retain tapered element



251-8 / 252-8 Ball Bearing

- Load capacity 10kg.
- · Acetal inner and outer race.
- Black carbon steel balls (251).
- Red stainless steel balls (252).
- Suits:
 - 25.4 x 1.6 tube
- Galv. steel
 - S/S
 - Dynopipe 254
- Steel Option; 253-8 (25kg load capacity)

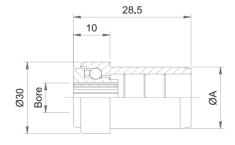


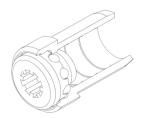


302 Ball Bearing

- Load Capacity 7kg
- Grey Polypropylene inner and outer race.
- Stainless steel balls caged as standard
- Suits:
 - 30 x 1.8 Plastic Tube (302)
 - 32 x 1.5 Galv or SS (322)
- Option: 6 , 8, 10mm Bore

A							
302	26.5mm						
322	28.1mm						

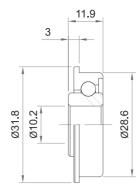






323-10 Ball Bearing

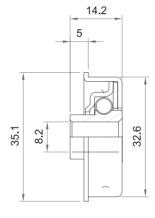
- · Load capacity 20kg.
- All steel bearing and holder
- Zinc plated finish.
- Suits;
 - 31.8 x 1.6 tube Galv. steel S/S
- · Optional bore sizes
 - 323-9.5
 - 323-11

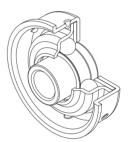




353-8 Ball Bearing

- Free running, ideal for gravity rollers.
- Load capacity 20kg.
- All steel bearing and holder.
- · Zinc plated finish.
- Suits;
 - -35×1.2 tube Galv. steel



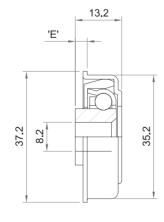


383C-8 / 383C-10 Ball Bearing

Very quiet and free running.

- Excellent for gravity rollers.
- Load capacity 50kg.
- All steel bearing and holder.
- Plastic ball cage, for quiet running.
- Zinc plated finish.
- Suits;
 - 38 x 1.5 tube Galv. Steel.

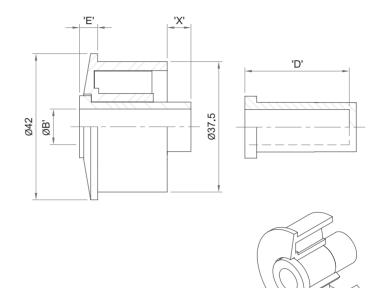
Bore Size	'E'
8	5
10	3





420 (P32D) Bushed Bearing

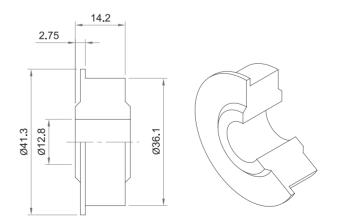
- · Load capacity 15kg.
- Bearing holder white ABS.
- Suits;
 - 42 x 2.5 tube PVC (32 PN12)



Code	Bush Material	Bore Size 'B'	Extension 'E'	Inside Extension 'X'	Useable Depth of Blind Bush 'D'
420-5	White Acetal	5.1	5.5	6.5	
420-6	White Acetal	6.5	5.5	6.5	
420-8	White Acetal	8.7	5.5	6.5	
420B-8	White Acetal	8.7	5.5	6.5	17
420-9.5	White Acetal	10	5.5	6.5	
420B-9.5	White Acetal	10	5.5	6.5	30
420-10	White Acetal	10.4	5.5	6.5	
420-11	Black Nylon	11.1	7.25		
420B-12	Black Nylon	12.5	4.5		20
420-12.7	Black Nylon	12.8	7.25		

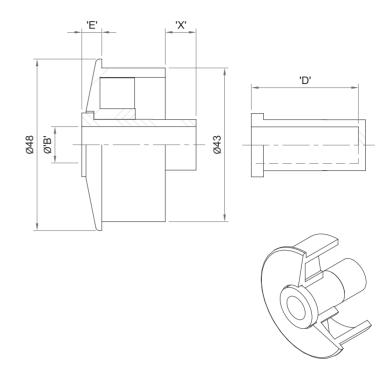
420HD-12 Bushed Bearing

- Load capacity 25kg.
- Black nylon.
- Suits;
 - 42.4 x 3.2 tube S/S (32 NB sch. 40)
- Option; 420HD-16



480 (P40D) Bushed Bearing

- Load capacity 15kg.
- Bearing holder white ABS.
- Suits;
 - 48.3 x 2.8 tube
- PVC (40 PN12)
- Dynopipe 48.3 x 2.8
- Galv. steel (40 NB light)
- S/S (40 NB sch. 10)

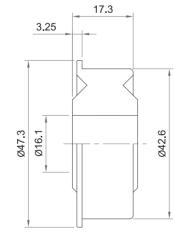


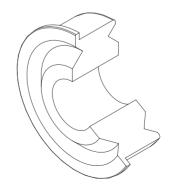
Code	Bush Material	Bore Size 'B'	Extension 'E'	Inside Extension 'X'	Useable Depth of Blind Bush 'D'
480-5	White Acetal	5.1	5.25	9	
480-6	White Acetal	6.5	5.25	9	
480-8	White Acetal	8.7	5.25	9	
480B-8	White Acetal	8.7	5.25	9	17
480-9.5	White Acetal	10	5.25	9	
480B-9.5	White Acetal	10	5.25	9	30
480-10	White Acetal	10.4	5.25	9	
480-11	Black Nylon	11.1	7	0	
480B-12	Black Nylon	12.5	4	1.5	20
480-12.7	Black Nylon	12.8	7	0	

• Also available – Grey polypropylene Bush for high acid environments

480HD-16 Bushed Bearing

- Load capacity 30kg.
- Black nylon.
 - Sults;
 - 48.3 x 2.8 tube PVC (40 PN12)
 - Dynopipe 48.3 x 2.8
 - Galv. steel (40 NB light)
 - S/S (40 NB sch. 40)
- Optional bore size 480HD-19



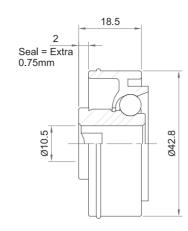


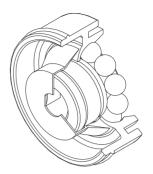
481-10/Q / 482-10/Q Ball Bearing

Our most popular bearing

Can be used for gravity or powered roller.

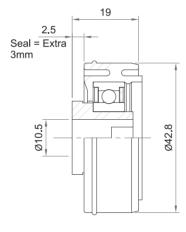
- · Load capacity 25kg.
- · Acetal inner and outer race.
- Black carbon steel balls (481).
- White stainless steel balls (482).
- Suits;
 - 48.3 x 2.8 tube Dynopipe 483
- Options
 - Sealed (481SE) or (482SE)
 - Greased (482G)
- Optional bore sizes
 - 10.6Q
 - 11
 - 12

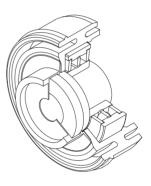




487-10/Q Ball Bearing

- Load capacity 100kg.
- White acetal bearing housing and bush.
- 6002 2RS precision bearing.
- Suits;
 - 48.3 x 2.8 tube Dynopipe 483
- Options
 - Extra seal (487SE)
 - S/S Bearing (487SS)
 - 10.6 Q shaft
 - 11 or 12mm round.

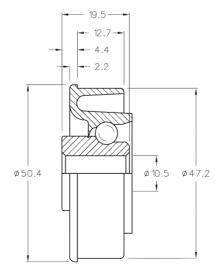




502 Ball Bearing

Light duty, free running ball bearing.

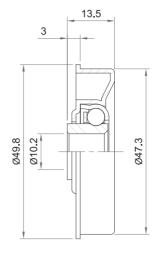
- · Load capacity 25kg.
- Acetal inner and outer race.
- Black stainless steel balls (502).
- Suits;
 - 50 x 1.5 tube Galv. steel
 - S/S
 - 50.8 x 1.43 Aluminium
- Option;
 - Greased (G)
 - Ali D
 - 11 or 12mm round.



503C-10 Ball Bearing

Very quiet and free running

- Excellent for gravity rollers.
- · Load capacity 60kg.
- · All steel bearing and holder.
- · Plastic ball cage, for quiet running.
- Zinc plated finish.
- · Suits;
 - 50 x 1.5 tube Galv. steel
 - 50.8 x 1.85 Galv. steel
- Optional bore sizes
 - 503C-8
 - 503C-11H
 - 503C-12

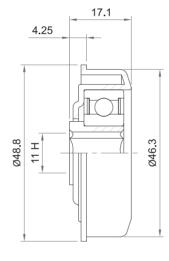


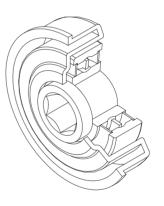


505-11H Precision Bearing

Medium duty precision bearing for use when plastic housing is not desirable.

- · Load capacity 100kg.
- Steel bearing housing and bush (z/plated).
- 6202Z Bearing.
- · Suits;
 - 50 x 1.5 tube Galv. steel
 - 50.8 x 1.85 Galv. steel
- Optional bore sizes
 - 505-8
 - 505-10
 - 505-12
- 505-10 = 7.5mm
- Suitable for driven rollers or continuous running





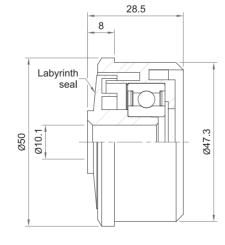
507-8 / 507-10 / 507-11H / 507-12 / 507-14 Precision Bearing

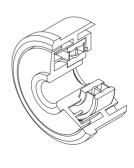
Most popular precision bearing. Matches with nylon sprockets.

- Load capacity 100kg.
- 6202 Bearing.
- Black polypropylene housing (Antistatic).
- Black polypropylene labyrinth (Antistatic except 8mm).
- Suits;
 - 50 x 1.5 tube Galv steel - 50.8 x 1.85 - Galv steel - 50 x 1.5 - S/S - 50.8 x 2 - S/S
 - 50 x 1.6 Aluminium

Option; 507SS

Suitable for driven rollers or continuous running

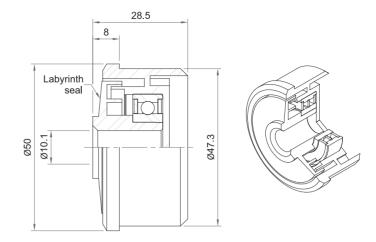




507B Precision Bearing

Blind bearing housing to seal tube.

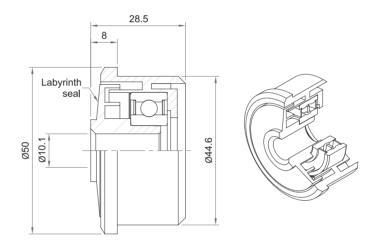
- Same details as 507.
- Not antistatic.
- Suitable for driven rollers or continuous running



507P-10 Precision Bearing

Most popular precision bearing. Matches with nylon sprockets.

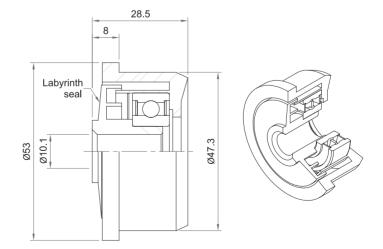
- Load capacity 100kg.
- 6202 Bearing.
- Grey polypropylene housing.
- Black polypropylene labyrinth.
- Suits;
 - 50 x 2.8 tube Dynopipe
- Optional bore sizes
 - 507P-8
 - 507P-Q
 - 507P-11H
 - 507P-12
- Also available: 507PSS Stainless Steel bearing
- Suitable for driven rollers or continuous running



507T Precision Bearing

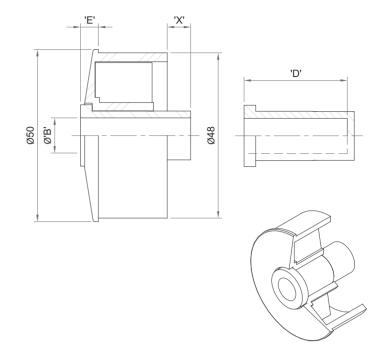
Extra large head to retain tapered elements.

- Same details as 507.
- Not antistatic.
- Suitable for driven rollers or continuous running



510 (S2) Bushed Bearing

- Load capacity 15kg.
- Bearing holder white ABS.
- Suits;
 - 50.8 x 1.6 tube Galv. steel
 - S/S



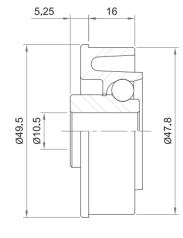
Code	Bush Material	Bore Size 'B'	Extension 'E'	Inside Extension 'X'	Useable Depth of Blind Bush 'D'
510-5	White Acetal	5.1	5.5	6.5	
510-6	White Acetal	6.5	5.5	6.5	
510-8	White Acetal	8.7	5.5	6.5	
510B-8	White Acetal	8.7	5.5	6.5	17
510-9.5	White Acetal	10	5.5	6.5	
510B-9.5	White Acetal	10	5.5	6.5	30
510-10	White Acetal	10.5	5.5	6.5	
510-11	Black Nylon	11.5	7.25	0	
510B-12	Black Nylon	12.4	4.5	0	20
510-12.7	Black Nylon	12.8	7.25	0	

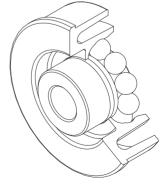
• Also available – Grey polypropylene Bush for high acid environments

512-10 Ball Bearing

Light duty, free running ball bearing.

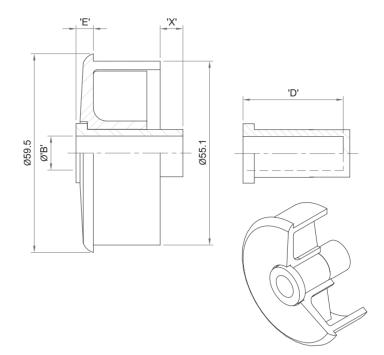
- Load capacity 25kg.
- Acetal inner and outer race.
- Red stainless steel balls (512).
- Suits;
 - 50.8 x 1.8 tube Galv. steel
 - 50.8 x 1.5 tube S/S
 - 50.8 x 1.43 Aluminium
- Option;
 - Greased (G)
- Optional bore sizes
 - 512-Q
 - 512-11H
 - 512-12





600 (50C) Bushed Bearing

- · Load capacity 15kg.
- Bearing holder white ABS.
- Suits;
 - 60 x 2.8 tube PVC (50 PN9)



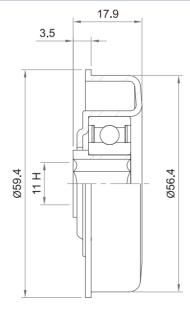
Code	Bush Material	Bore Size 'B'	Extension 'E'	Inside Extension 'X'	Useable Depth of Blind Bush 'D'
600-5	White Acetal	5.1	5.25	6.5	
600-6	White Acetal	6.5	5.25	6.5	
600-8	White Acetal	8.7	5.25	6.5	
600B-8	White Acetal	8.7	5.25	6.5	17
600-9.5	White Acetal	10	5.25	6.5	
600B-9.5	White Acetal	10	5.25	6.5	30
600-10	White Acetal	10.5	5.25	6.5	
600-11	Black Nylon	11.5	7	0	
600B-12	Black Nylon	12.4	4.5	0	20
600-12.7	Black Nylon	12.8	7	0	

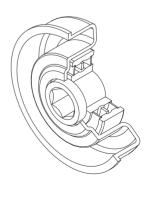
Also available – Grey polypropylene Bush for high acid environments

605-11H Precision Bearing

Medium duty precision bearing for use where plastic housing is not desirable eg. extreme temp.

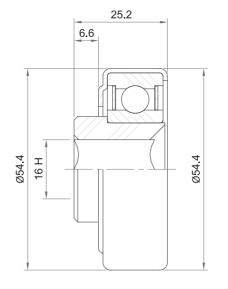
- Load capacity 100kg.
- Steel bearing housing and bush (z/plated).
- 6202Z bearing.
- Suits;
 - 60.3 x 2.3 tube Galv steel
- Optional bore sizes
 - 605-8
 - 605-10
 - 605-12
- Suitable for driven rollers or continuous running

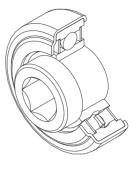




605HD-16H Precision Bearing

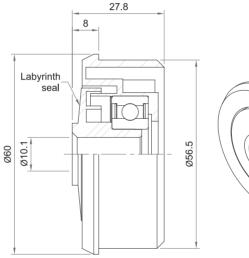
- · Heavy duty
- Load capacity 500kg.
- Steel bearing housing and bush.
- 6205-2RS Bearing.
- Suits:
 - 60.3 x 3.6 tube Galv steel (50 NB Med.)
 - S/S (50 NB sch. 40)
- Options; 605HD-16, 605HD-19, 605HD-20
- Suitable for driven rollers or continuous running

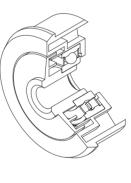




607-10 Precision Bearing

- · Load capacity 100kg.
- 6202 Bearing.
- Black polypropylene housing (Antistatic).
- Black polypropylene labyrinth, (Antistatic except 8mm).
- Suits:
 - 60.3 x 2.3 tube Galv steel
 - S/S (sch. 10)
- Available; 607SS Stainless steel bearing
- Optional bore sizes
 - 607-8
 - 607-11H
 - 607-12
- Suitable for driven rollers or continuous running

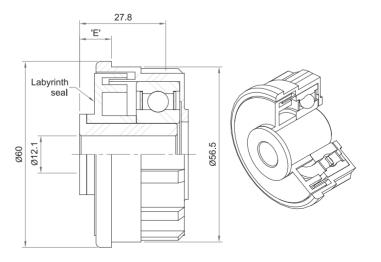




607HD-16 Precision Bearing

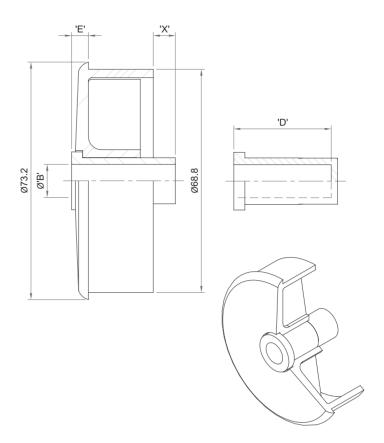
- Load capacity 180kg.
- 6204 Bearings.
- Black nylon housing.
- Black polypropylene labyrinth and reducer bush.
- Suits;
 - 60.3 x 2.3 tube Galv steel
 - S/S (sch. 10)
- Available; 607HDSS Stainless steel bearing
- Optional bore sizes
 - 607HD-12
 - 607HD-20
- Suitable for driven rollers or continuous running

Bore Size	'E'
12	10
16	10
20	7.75



750 (P65C) Bushed Bearing

- Load capacity 20kg.
- Bearing holder white ABS.
- Suits;
 - 75 x 3 tube PVC (65 PN9)



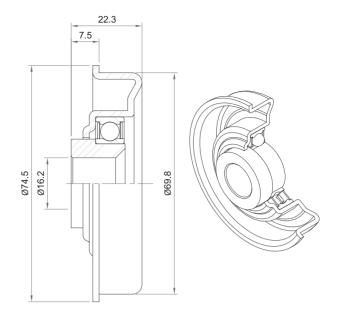
Code	Bush Material	Bore Size 'B'	Extension 'E'	Inside Extension 'X	Useable Depth of Blind Bush 'D'
750-5	White Acetal	5.1	5.5	6	
750-6	White Acetal	6.5	5.5	6	
750-8	White Acetal	8.7	5.5	6	
750B-8	White Acetal	8.7	5.5	6	17
750-9.5	White Acetal	10	5.5	6	
750B-9.5	White Acetal	10	5.5	6	30
750-10	White Acetal	10.5	5.5	6	
750-11	Black Nylon	11.5	7.5	0	
750B-12	Black Nylon	12.4	5	0	20
750-12.7	Black Nylon	12.8	7.5	0	

[•] Also available – Grey polypropylene Bush for high acid environments

755-16 / 755-19 Ball Bearing

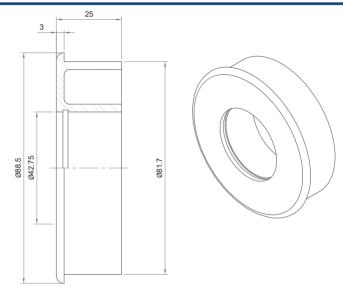
- · Load capacity 200kg.
- Steel bearing, housing and bush (z/plated).
- 6905Z bearing.
- Suits;
 - 76 x 3.2 tube Galv steel (65 NB light)

Bore Size	'E'	'X'
16	10	30
19	7	27



890 (CP80) Bushed Bearing

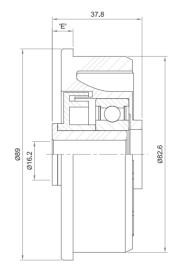
- White ABS reducer bush.
- Suits; 89 x 3.5 tube PVC (80PN9)
- Fits range of reducer bearings;
 - 480 Bushed
 - 480HD Bushed
 - 481/2 Ball Bearings
 - 487 Precision Bearings

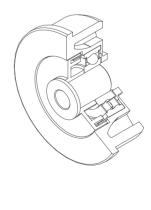


897-16 Precision Bearing

- Load capacity 180kg.
- 6204 Bearings.
- · Black polycarbonate housing.
- Black polypropylene labyrinth and reducer bush.
- Suits;
 - 89 x 3.2 tube
- Galv steel (80 NB light)
- S/S (schedule 10)
- Aluminium
- Available; 897SS Stainless Steel bearing
- Optional bore sizes
 - 897-12
 - 897-20
- Suitable for driven rollers or continuous running

Bore Size	.E.
12	9
16	9
20	6.75

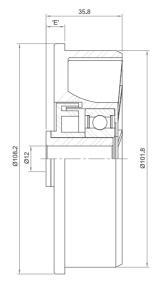


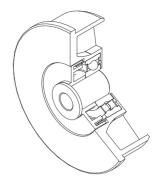


1147-20 Bushed Bearing

- · Load capacity 180kg.
- 6204 Bearings.
- · Black polycarbonate housing.
- Black polypropylene labyrinth and reducer bush.
- Suits;
 - 114 x 6 tube PV
- PVC (100 PN12) - Steel (100 NB sch.40)
 - S/S (100 NB sch.40)
- Available; 1147SS Stainless Steel bearing
- Optional bore sizes
 - 1147-12
 - 1147-16

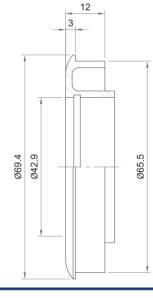
Bore Size	'E'
12	9.5
16	9.5
20	7.25

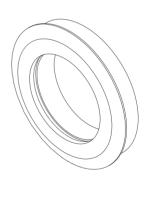




TR4 Reducer Bush

- Reducer bush for large end of Dynopipe taper.
- Can also be used as bearing holder for 75×5 PVC (65 PN15).
- White ABS.
- Fits range of reducer bearings;
 - 480 Bushed
 - 480HD Bushed
 - 481/2 Ball Bearings
 - 487 Precision Bearings









A to B, seamlessly.



