

Edition
2019

FKL®

MADE IN SERBIA

FACTORY OF ROLLING BEARINGS
AND CARDAN SHAFTS

AGRO POINT HUBS

The integrated solutions
for modern agricultural attachments





AGRO POINT for Seeders
IL20



AGRO POINT
IL30



AGRO POINT
IL40



AGRO POINT
IL50



AGRO POINT
IL60

AGRO POINT HUBS

The integrated solutions for modern agricultural attachments

Demand of today's agricultural market is permanent increasing of productivity respecting the environment at the same time.

Agricultural equipment should satisfy a very rigid and demandable conditions of farmers: longer, harder and faster operating with minimal work stops.

In order to satisfy a modern tendency in agricultural equipment development, FKL has developed the AGRO POINT product line. In combination with discs this bearing hub is designed to work in various agricultural applications.








Our goal is to propose a complete range of modern hubs in order to have a ready solutions for any agricultural machinery.

Each model of bearing has a certain loading capacity and basic dimensions but, mounting dimensions could be customer tailored solutions.

Considering that time is the most important factor for farmers, AGRO POINT product line is made as a long-term integral solution which doesn't require maintenance or service and simply to be replaced after its lifetime.

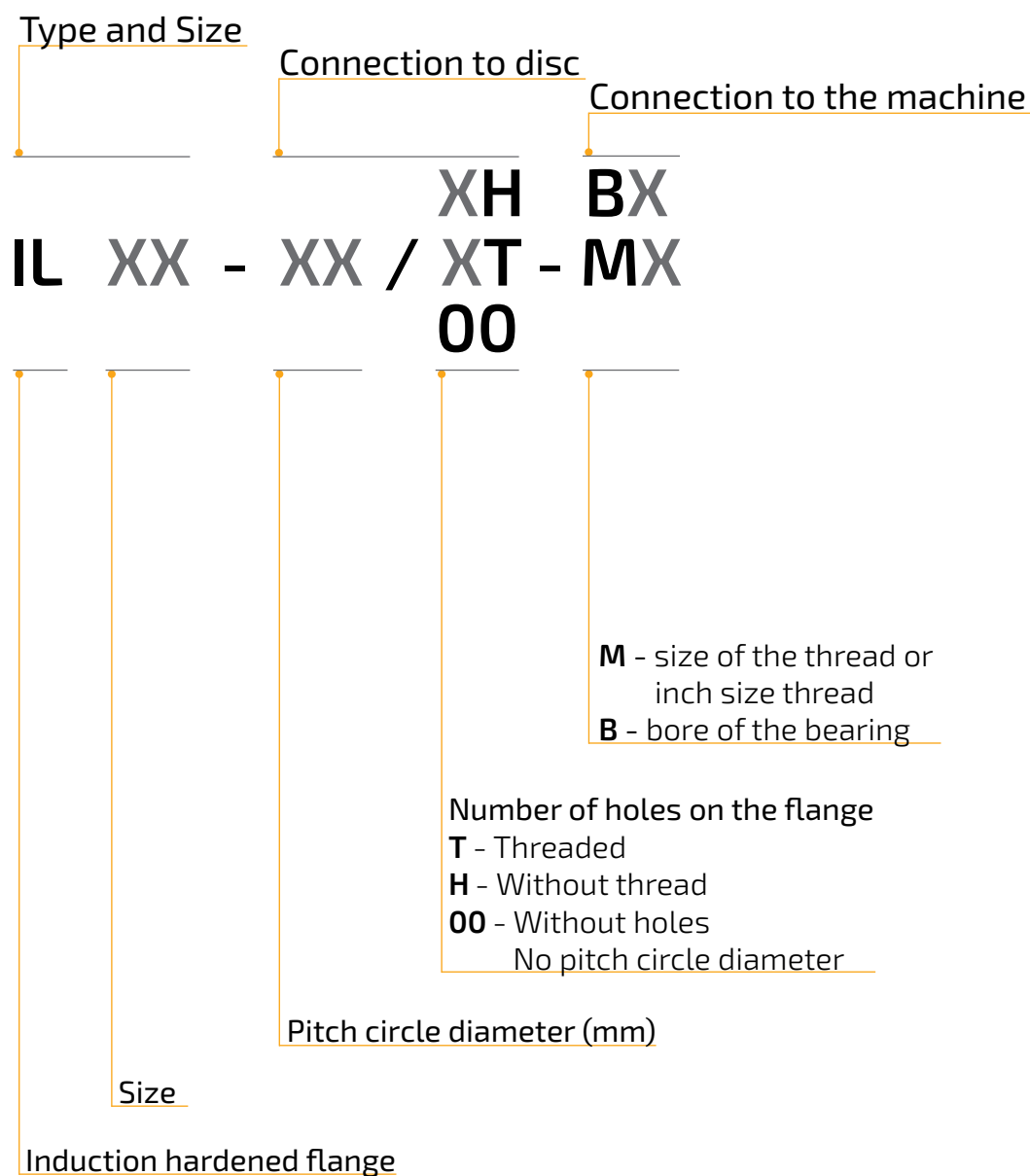
FKL AGRO POINT helps to reduce the lubricant consumption and its unique sealing solution reduces possible soil contamination.

Sealing Type Overview

Flange side/Open side	Cross section	Main application
O-ring+single lip seal/ Triple lip seal		Seed Drills
Triple lip seal/Triple lip seal		Seed Drills
Metal shield+single lip seal/ Triple lip seal		Seed Drills
Metal shield+single lip seal/ Triple lip seal+cover plate		Seed Drills
Triple lip seal/ Triple lip seal+protective steel cap		Seed Drills
O-ring+steel shield+RS seal/ RS seal+Dirtblock seal+cover plate		Disc Harrows
O-ring+steel shield+single lip seal/ single lip seal+Dirtblock seal+ cover plate		Disc Harrows

Specific seal design could be recommended and developed by our application engineers in order to provide the best solution for specific application and typical environment.

AGRO POINT Designation System



AGRO POINT IL20

BEARING SOLUTION FOR SEEDING MACHINES, INTEGRATED FLANGE

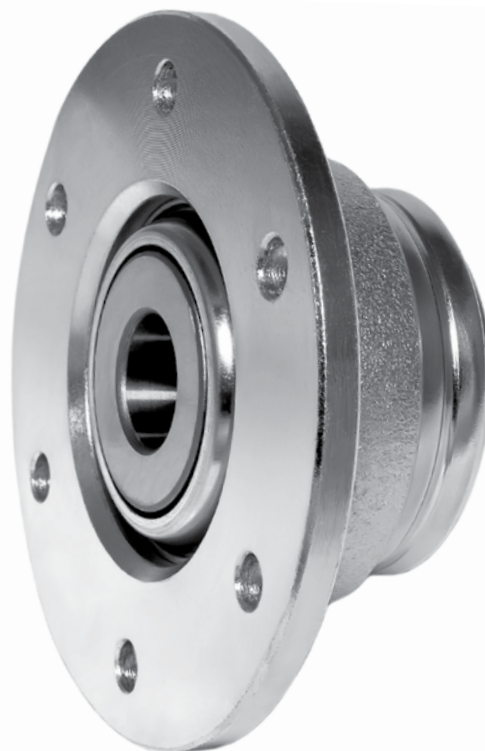
PRODUCT DESCRIPTION

Agro Point IL20 offers improved bearing solution to support producers of seeders. Optimized internal bearing design, four-point contact ball bearing, with integrated flange gives the possibility for higher loads, faster and more reliable operating of seeding machines.

ADVANTAGES

Extended product reliability

- Forged flange increases the rigidity of the bearing and prevents deformation at mounting and operating.
- Longer bearing's life span due to powerful sealing and bigger loading rate for 12% comparing to previous, standard version with double row angular contact ball bearing in metal sheet housing.
- Relubrication free option helps to extend service life and cuts operating costs.
- Zinc-coated flange surface, good anti-corrosion protection.
- Hermetic steel-sheet cap prevents penetration of dust and humidity.



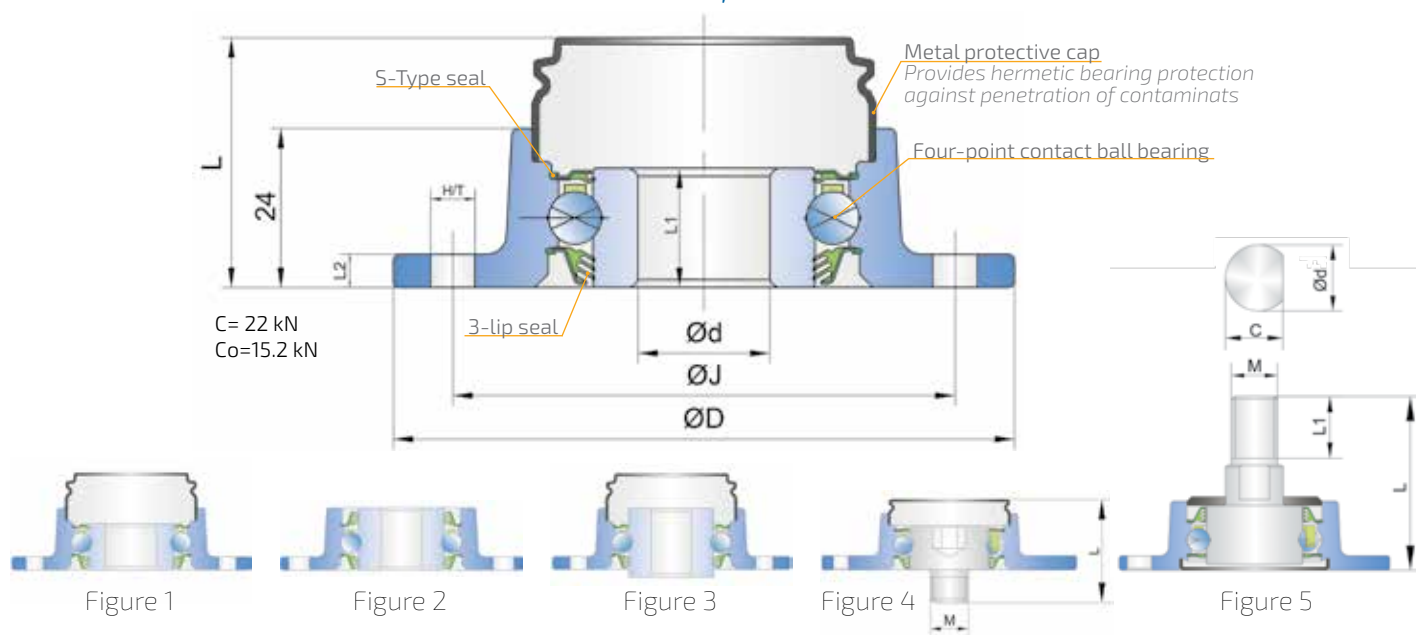
GREATER PROFIT OPPORTUNITIES

- Reduction of assembly and labor costs due to easy mounting and replacement.
- Maximizing profit rate of the Buyer by using of high quality level unit per optimized price.



AGRO POINT IL20

BEARING SOLUTION FOR SEEDING MACHINES, INTEGRATED FLANGE



IL20	J	D	H/T	d	M	C	L	L ₁	L ₂	kg	Figure
IL20-73/6H-B16	73.5	94	6x6.5	16	-	-	37.7	27	5	0.6	3
IL20-75/6H-B20	75	94	6x6.5	20	-	-	37.7	18	5	0.5	1
IL20-75/6H-B17	75	94	6x6.5	17	-	-	37.7	18	5	0.5	1
IL20-75/6H-B16	75	94	6x6.5	16	-	-	37.7	18	5	0.5	1
IL20-79/6H-B16	79.4	94	6x8.1	16	-	-	24	24	5	0.5	2
IL20-80/5H-M16	80	94	5x8.5	20	M16	18.5	60.5	21.5	5	0.59	5
IL20-82/5T-B16	82	108	5xM8	16.2	-	-	24	24	6	0.64	2
IL20-92/5H-M16-R	92	108	5x6.5	-	M16	-	44	14	6	0.67	4
IL20-92/5H-M16-L	92	108	5x6.5	-	M16-Left	-	44	14	6	0.67	4

ADDITIONAL OPTIONS

- Triple lip sealing on both sides is also available.
- Design flexibility: the standard 16 mm, 17 mm and 20 mm bearings are available with different J parameter.



MOUNTING INSTRUCTIONS

- Rivets 6 mm or 1/4".
- Self locking class 8 hex nuts with helical spring washer.
- Disc diameter: up to 400 mm.
- Required tools: Torque wrench with hexagon socket: size 24 (M16), Torque 130 Nm; size 30 (M20), Torque 200 Nm.



AGRO POINT IL30

BEARING SOLUTION FOR HARSH SEEDING AND PLOUGH CONDITIONS, INTEGRATED FLANGE

PRODUCT DESCRIPTION

Agro Point IL30 is reinforced version of IL20 for heavy duty seeding machines and plough disc for working in harsh conditions.

It is recommended for use in NO-TILL FARMING technology, also called ZERO TILLAGE or DIRECT SEEDING, due to specific working conditions - 2-3 times bigger loading and harsh seeding conditions.

Application of IL30 in no-till farming implies way of growing crops without disturbing the soil through tillage.

Optimized internal bearing design, four-point contact ball bearing, with integrated flange gives the possibility for higher loads, faster and more reliable operating of seeders.

ADVANTAGES

Extended product reliability

- Longer bearing's life span due to powerful sealing and increased loading rate for 30% comparing to IL20.
- Relubrication free option helps to extend service life and cut operating costs.
- Zinc-coated flange surface, good anti-corrosion protection.



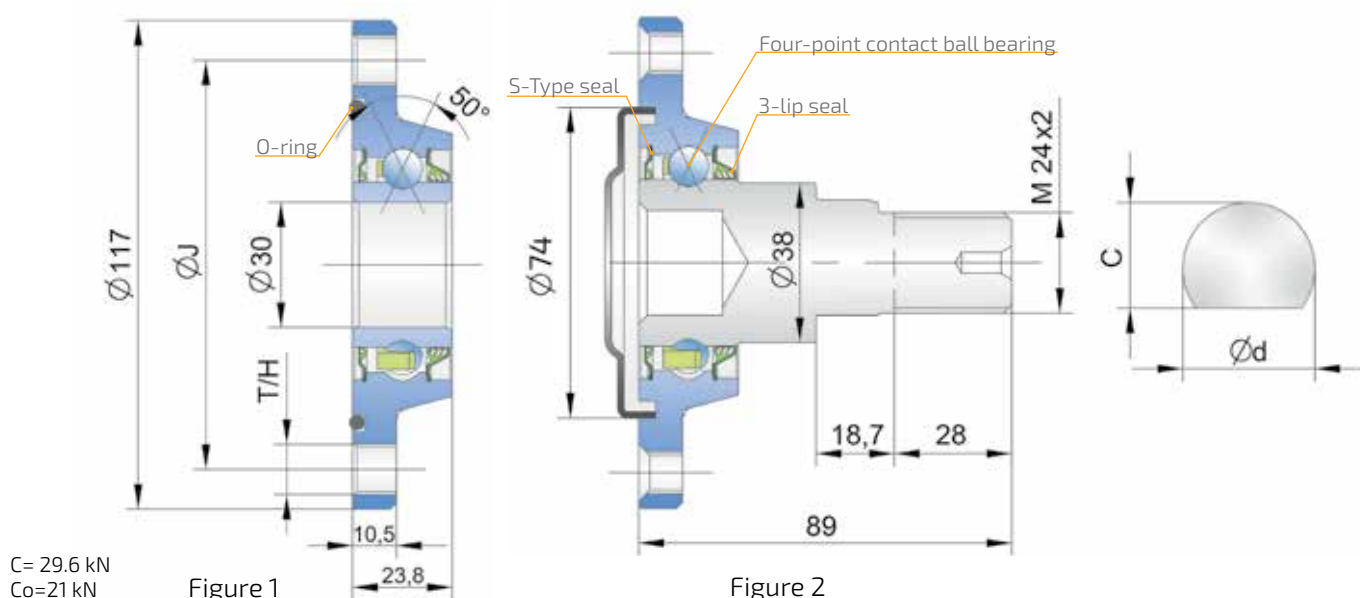
GREATER PROFIT OPPORTUNITIES

- Reduction of assembly and labor costs due to easy mounting and replacement.
- Maximizing profit rate of the Buyer by using of high quality level unit per optimized price.



AGRO POINT IL30

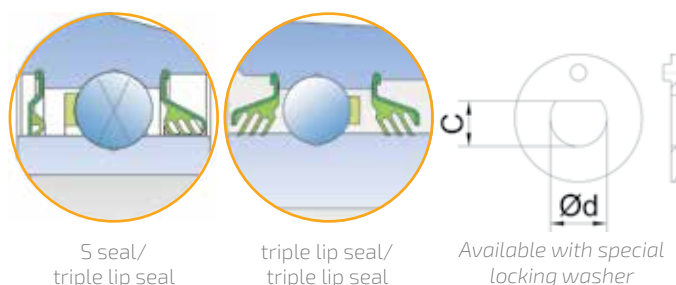
BEARING SOLUTION FOR HARSH SEEDING AND PLOUGH CONDITIONS, INTEGRATED FLANGE



IL30	J	H/T	d	C	kg	Figure
IL30-98/4T-B30	98	4xM12x1.25	-	-	0.905	1
IL30-98/5T-B30	98	5xM12x1.25	-	-	0.925	1
IL30-98/4H-B30	98	4xØ10	-	-	0.905	1
IL30-100/4T-M24x2	100	4xM10	30	27.5	1.52	2

ADDITIONAL OPTIONS

Standard seal design could be improved by triple lip sealing on both sides.



MOUNTING INSTRUCTIONS

- Bolt M12x1.25 mounting torque: 100 Nm.
- Nut torque: 300 Nm.
- Self locking class 8 hex nuts (M22 and M24) with helical spring washer.
- Required tools: Torque wrench with hexagon socket: size 19 (Bolts M12x1,25); size 32 (Nut M22); size 36 (Nut M24).



AGRO POINT IL40

INTEGRATED FLANGE, MAINTENANCE FREE BEARING

PRODUCT DESCRIPTION

Agro point IL40 is FKL's high performance solution for disc harrows, greased and sealed for the life of the bearing.

Optimized internal bearing design, double row angular contact ball bearing, with integrated flange and Dirtblock sealing option provides a multiple service life of this bearing in relation to the traditional one.

ADVANTAGES

- Longer bearing's life span due to powerful Dirtblock sealing.
- Higher impact resistance from flange side of the hub due to the thicker forged cover.
- Maintenance free option helps to extend service life and cut operating costs.
- Zinc-coated flange surface, corrosion resistant.
- Easy mounting and replacement.

RECOMMENDED WORKING CONDITIONS

- Tractor speed: 5-20 km/h
- Temperature range: -20 to +50 C
- Disc diameter: from 400 to 560 mm, for disc sizes from 500 to 560 mm with elastic suspension only.



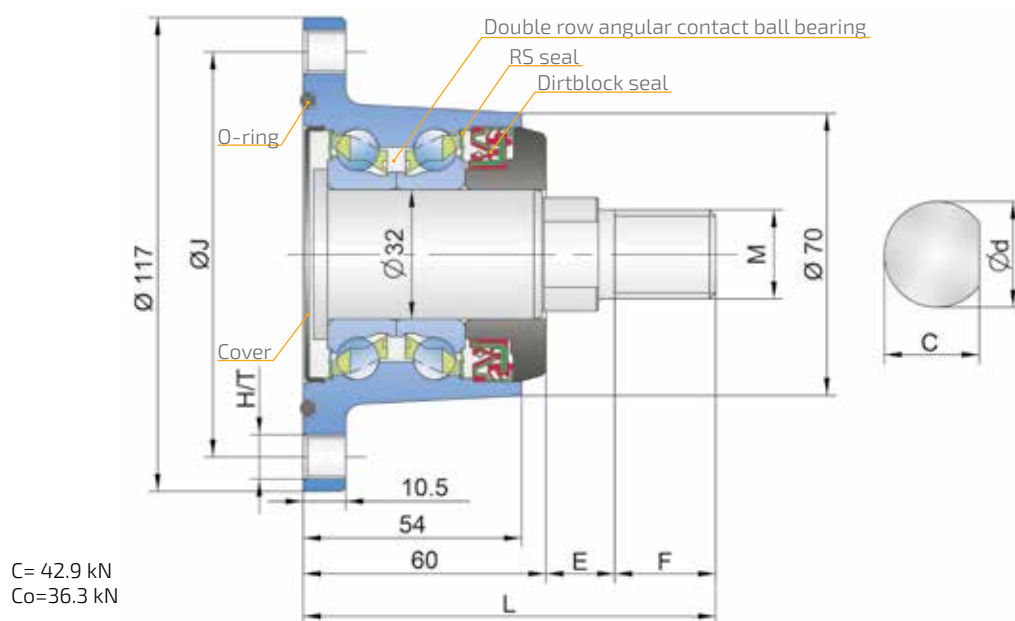
GREATER PROFIT OPPORTUNITIES

- Reduction of assembly and labor costs due to easy mounting and replacement.
- Maximizing profit rate of the Buyer by using of high quality level unit per optimized price.



AGRO POINT IL40

INTEGRATED FLANGE, MAINTENANCE FREE BEARING



IL40	J	H/T	d	C	M	E	F	L	kg
IL40-98/4T-M22	98	4xM12x1.25	27.95	25.4	M22x1.5	17	25	102	2
IL40-98/5T-M22	98	5xM12x1.25	27.95	25.4	M22x1.5	17	25	102	2
IL40-98/6T-M22	98	6xM12x1.25	27.95	25.4	M22x1.5	17	25	102	2

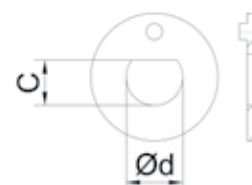
ADDITIONAL OPTIONS

Design flexibility: the standard bearing is available with different J parameter, hole patterns and number of holes.

Aftermarket kit is also available optionally: Agro Point bearing, bolts M12x1.25, washer, nut M22x1.5.



RS seal/
Dirtblock seal



Available with special
locking washer

MOUNTING INSTRUCTIONS

- Bolt M12x1.25 mounting torque: 100 Nm.
- Nut torque: 300 Nm.
- Self locking class 8 hex nuts (M22 and M24) with helical spring washer.
- Required tools: Torque wrench
hexagon socket: size 19 (Bolts M12x1,25);
size 32 (Nut M22);
size 36 (Nut M24).



AGRO POINT IL50

INTEGRATED FLANGE, MAINTENANCE-FREE BEARING FOR INDEPENDENT DISCS

PRODUCT DESCRIPTION

Agro Point IL50 is FKL's high performance solution for disc harrows, greased and sealed for the life of the bearing.

Optimized internal bearing design, double row angular contact ball bearing, with integrated flange and Dirtblock sealing option provides a multiple service life of this bearing in relation to the traditional one.

ADVANTAGES

- Longer bearing's life span due to the powerful Dirtblock sealing and 30% bigger loading capacity than hubs from the same type/size group including former IL2-117 type.
- Maintenance free option helps to extend service life and cut operating costs.
- Zinc-coated flange surface, corrosion resistant.
- Easy mounting and replacement.

RECOMMENDED WORKING CONDITIONS

- Tractor speed: 5 ÷ 20 km/h
- Temperature range: -20 ÷ +50°C
- Disc diameter: up to 710mm (28") - from 630-710 mm with elastic suspension only.



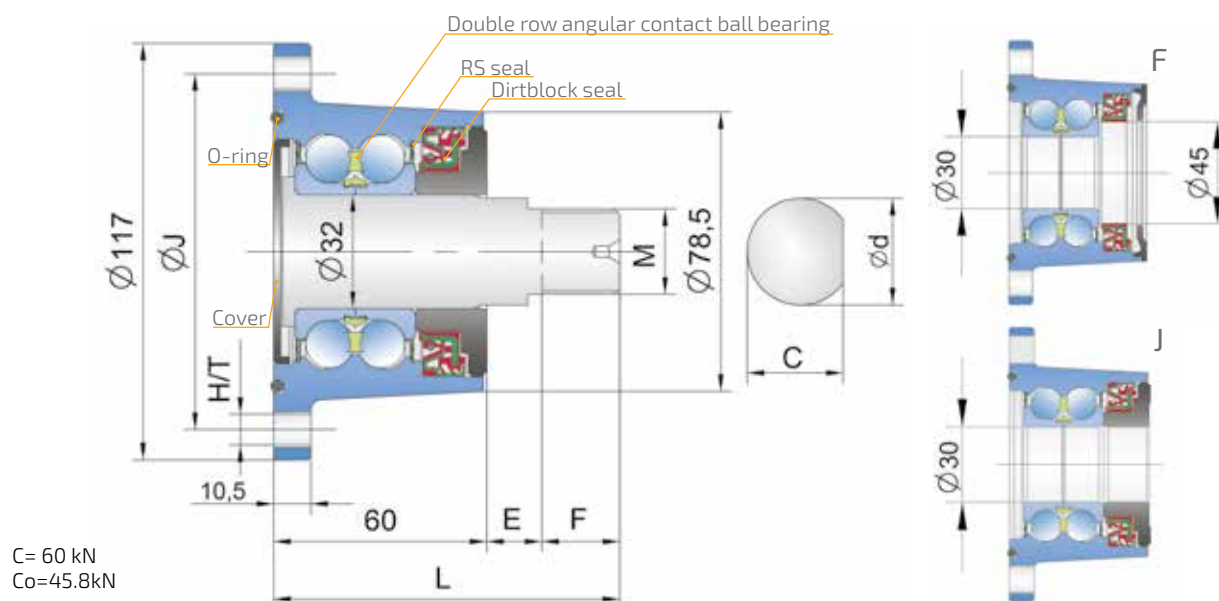
GREATER PROFIT OPPORTUNITIES

- Reduction of assembly and labor costs due to easy mounting and replacement.
- Maximizing profit rate of the Buyer by using of high quality level unit per optimized price.



AGRO POINT IL50

INTEGRATED FLANGE, MAINTENANCE-FREE BEARING FOR INDEPENDENT DISCS



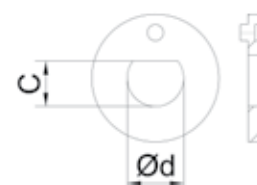
ADDITIONAL OPTIONS

Design flexibility: the standard bearing is available with different J parameter, hole patterns and number of holes.

Aftermarket kit is also available optionally: Agro Point bearing, bolts M12x1.25, washer, nut M22x1.5.



RS seal/Dirtblock seal



Available with special locking washer

MOUNTING INSTRUCTIONS

- Bolt M12x1.25 mounting torque: 100 Nm.
- Nut torque: 300 Nm.
- Self locking class 8 hex nuts (M22 and M24) with helical spring washer.
- Required tools: Torque wrench
hexagon socket: size 19 (Bolts M12x1,25);
size 32 (Nut M22);
size 36 (Nut M24).



AGRO POINT IL60

MAINTENANCE-FREE BEARING WITH INTEGRATED FLANGE FOR HARSH TILLAGE

PRODUCT DESCRIPTION

Agro Point IL60 is designed as a heavy duty option of standard size IL50 for harsh tillage and larger diameter tillage discs more than 710 mm or 28".

Combination of larger components and reliable Dirtblock seal provides the bearing operating at higher loads and tillage speeds as well.

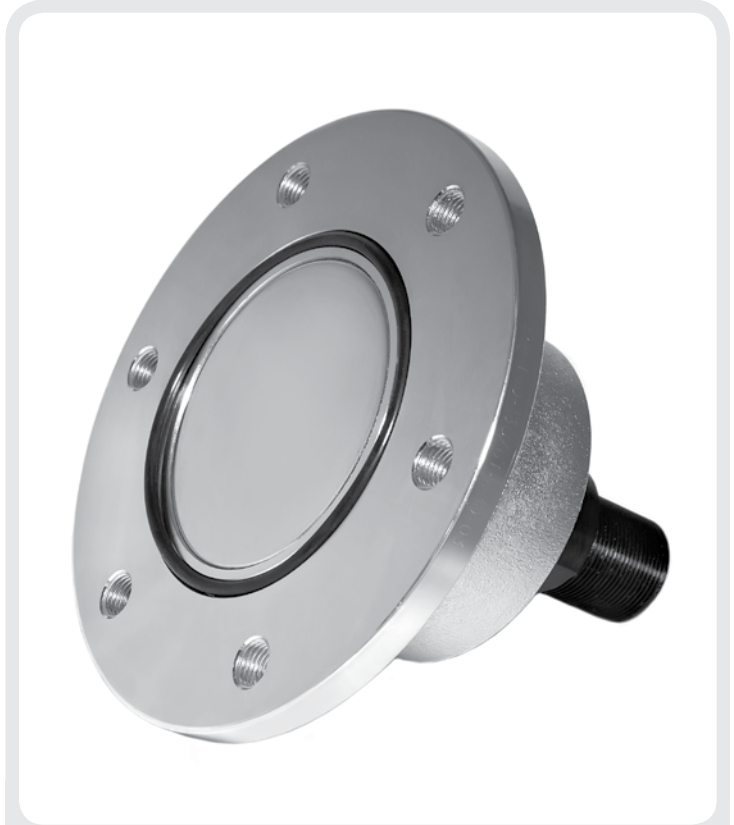
Agro Point IL60 is greased and sealed for the life which a multiple service life of this bearing comparing to standard one.

ADVANTAGES

- 11% bigger loading capacity than standard size bearing IL50.
- 31% larger shaft diameter.
- Maintenance free option helps to extend service life and cut operating costs.
- Zinc-coated flange surface, corrosion resistant.
- Easy mounting and replacement.

RECOMMENDED WORKING CONDITIONS

- Tractor speed: 5 ÷ 20 km/h
- Temperature range: -20 ÷ +50°C
- Disc diameter: up to 910 mm (36")



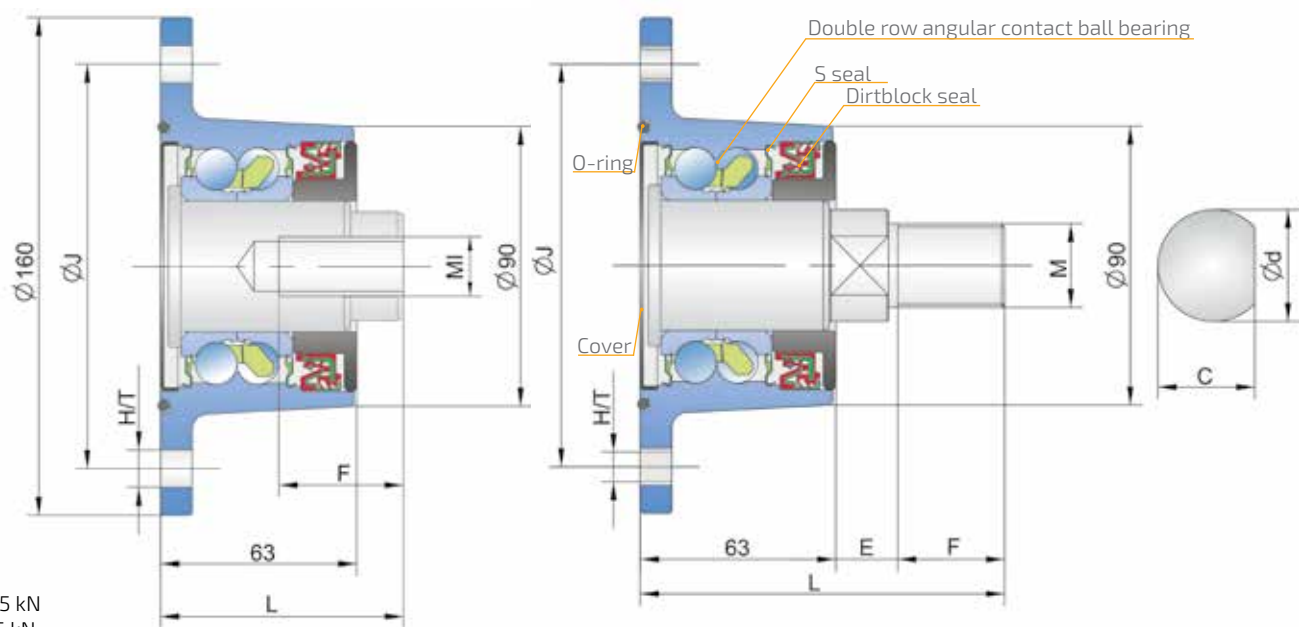
GREATER PROFIT OPPORTUNITIES

- Reduction of assembly and labor costs due to easy mounting and replacement.
- Maximizing profit rate of the Buyer by using of high quality level unit per optimized price.



AGRO POINT IL60

MAINTENANCE-FREE BEARING WITH INTEGRATED FLANGE FOR HARSH TILLAGE



C= 66.35 kN
Co=56.5 kN

IL60	J	H/T	d	C	M	MI	E	F	L	kg
IL60-00-M20X1.5	-	blank	31	34.9	-	M20X1.5	-	40	78	4.2
IL60-120/4H-M20	120	4x11	34	31	-	M20	-	14	96	4.35
IL60-122/6H-M24	122	6x12	35	32.5	M24x2	-	16.5	27	106.5	4.2
IL60-130/6T-M24	130	6xM12x1.25	30	28	M27x2	-	24.5	33.5	121	4.4
IL60-130/6T-M27	130	6xM12x1.25	35	33.5	M27x2	-	21	33.5	117.5	4.4
IL60-130/6T-M30-03	130	6xM12x1.25	40	37	M30x1.5	-	20	29	112	4.4
IL60-133/4H-3/4-16UNF	133.35	4x13.5	31	34.9	-	3/4-16UNF	-	40	78	4.1
IL60-140/5T-M27	130	6xM12x1.25	35	33.5	M27x2	-	21	33.5	117.5	4.4
IL60-140/6T-M27	130	6xM12x1.25	35	33.5	M27x2	-	21	33.5	117.5	4.4

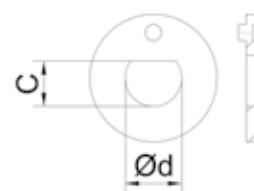
ADDITIONAL OPTIONS

Design flexibility: the standard bearing is available with different J parameter, hole patterns and number of holes.

Aftermarket kit is also available optionally: Agro Point bearing, bolts M12x1.25, washer, nut M22x1.5.



S seal/Dirtblock seal



Available with special locking washer

MOUNTING INSTRUCTIONS

- Bolt M12x1.25 mounting torque: 100 Nm.
- Nut torque: 400 Nm.
- Self locking class 8 hex nuts (M24 and M27) with helical spring washer.
- Required tools: Torque wrench with hexagon socket: size 19 (Bolts M12x1,25); size 36 (Nut M24); size 41 (Nut M27).



AGRO POINT

HUBS

The logo for FKL, featuring the letters 'FKL' in a bold, blue, sans-serif font, followed by a stylized blue circular emblem containing a white infinity-like symbol. A small registered trademark symbol (®) is positioned above the 'L'.

MADE IN SERBIA

Industrial zone bb
21235 Temerin
SERBIA

Head of Sales +381 21 6841 222
Foreign Markets +381 21 6841 190
+381 21 6841 201
+381 21 6841 205
+381 21 6841 187

sales@fkl-serbia.com
marketing@fkl-serbia.com

FACTORY OF ROLLING BEARINGS AND CARDAN SHAFTS

www.fkl-serbia.com