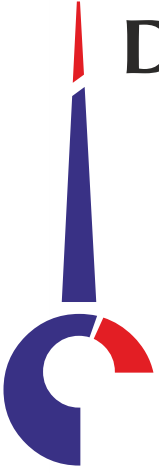


DANTAL HYDRAULICS PVT. LTD.

Total Solutions in Hydraulics



About US



- Established in year 1990
- Leading manufacturer of Hydraulic Cylinders & Systems in India
- Supplying Half a Million cylinders a year. Working towards Million Cylinders a year
- Global OEM Customer base
- Manufacturing Plants – 5
- Products
 - Hydraulic Cylinders
 - Hydraulic Systems
 - Manifold Block assemblies

HYDRAULIC CYLINDERS PRODUCT RANGE

CYLINDERS-

- Welded construction.
- Tie Rod construction.
- Bolted flange construction.
- Complete range of mounting
- Bore 40 mm to 500 mm
- Stroke up to 11000 mm



SPECIAL CYLINDERS

- Hydro-gas suspension cylinders for heavy vehicles
- Multistage double acting Telescopic Cylinders
- Cylinders for -40⁰ C Ambient Temperature
- Cylinders with position sensors and integrated valves.

CERTIFICATIONS



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WELDED AGRICULTURAL APPLICATION CYLINDERS

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- HYDRAULIC CYLINDER EXTENSION
AND RETRACTION FORCE – PAGE 18
- CONTACT DETAIL – PAGE 19



FEMALE CLEVIS (FORK) Cylinders Design & Specifications

Double Acting with Fork Clevis Ends
With 4 Ports in cylinder for easy access.



Colour:

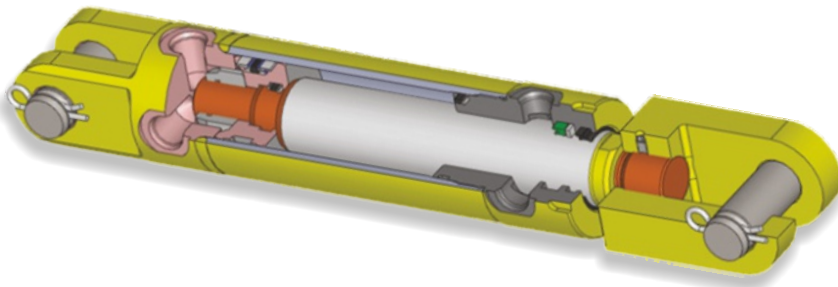
- Industrial Gloss Black.
- Industrial Gloss Yellow.

Working Pressure : 210 Bar - 3045 PSI

Cylinder Test Pressure : 315 Bar - 4568 PSI

Seals Maximum Operating Pressure and Conditions:

- Pressures: 414 Bar - 6000 PSI
- Temperature: -30 deg C to +110 deg C
- Speed: 0.5 Meters per Second
- Shock and load holding Capacity
- Double acting K-DAS piston seal providing positive displacement under all rated pressure situations



Rod Material:

- EN8D/C45 round bar
- Chrome Thickness: 20 to 30 Microns hard chromed piston rod for superior corrosion resistance

Tube Material:

- CDS ST52/E355 steel tube • Seamless steel tube accurately honed to ensure smooth operation and extended seal life

Gland Material:

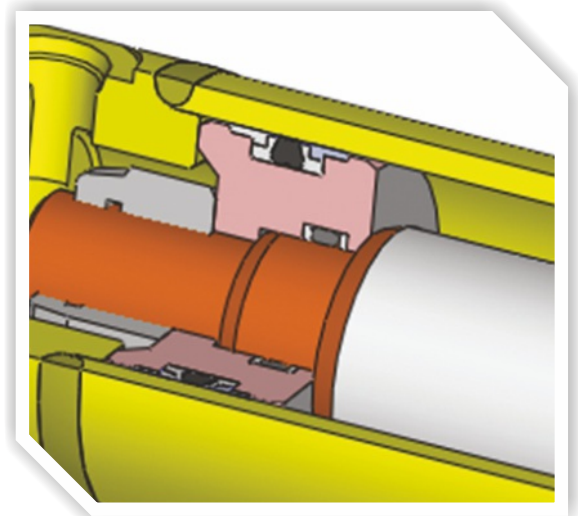
- SG IRON SG500/7 Spheroidal Graphite Cast Iron, tensile strength - 500 N/mm².

Piston, Front Clevis, Rear End:

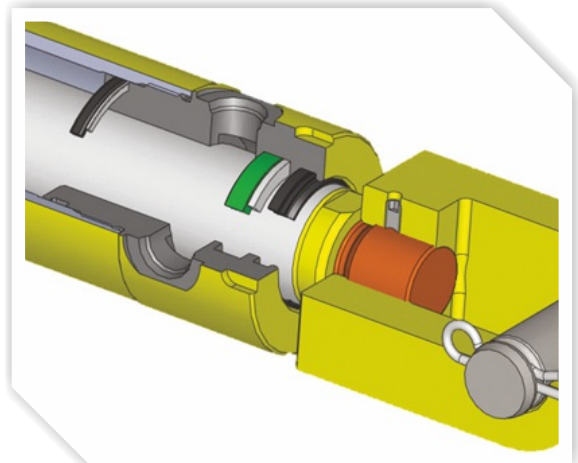
- EN8D/C45 tensile strength - 650 N/mm²

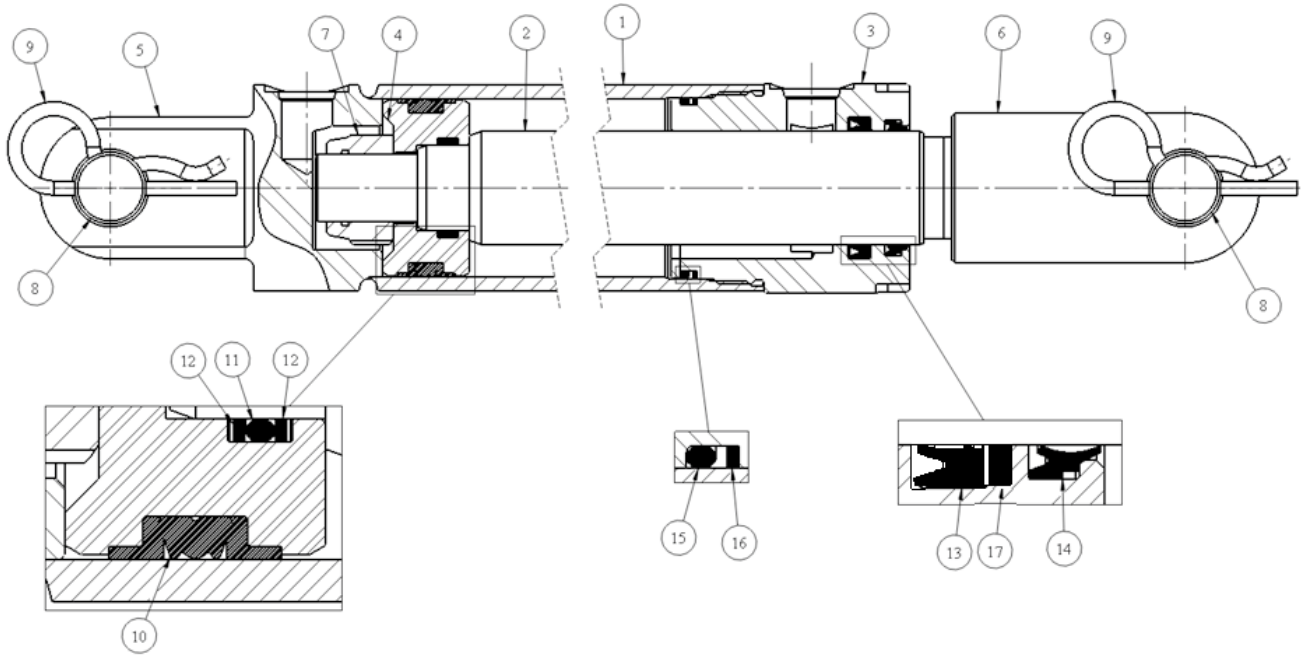


Seal arrangement Cap End Side



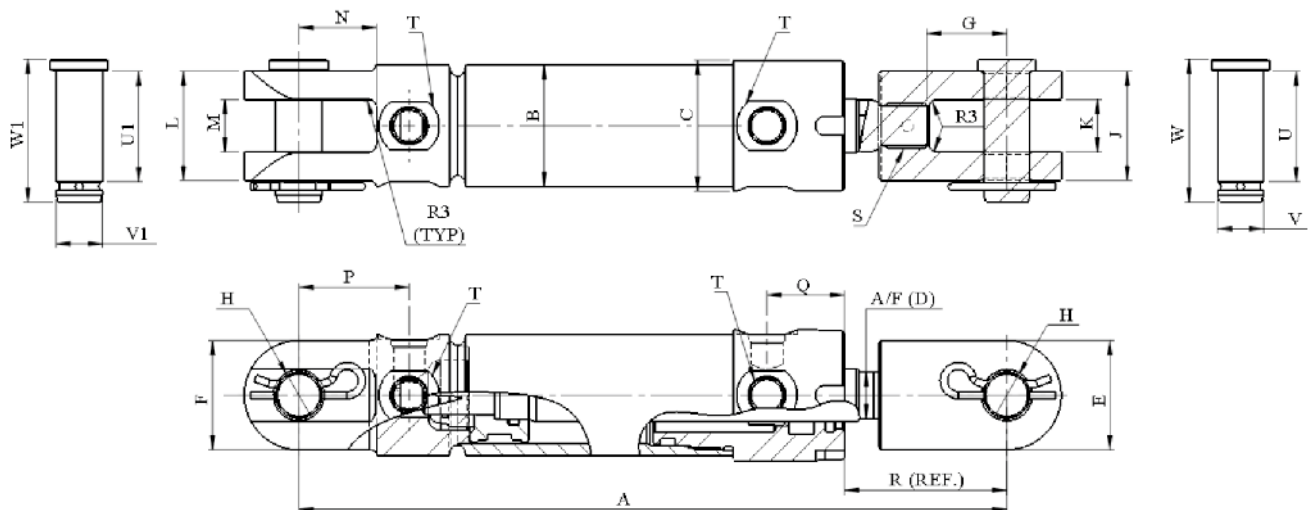
Seals arrangement Rod Eye Side





No	PART	DESCRIPTION
1	CYLINDER TUBE	CDS ST52/E355 seamless steel tube, accurately honed to ensure smooth operation and extended seal life.
2	PISTON ROD	High precision grounded, EN8D/C45 round bars, hard chrome plated with deposit of 20-30 microns, tensile strength – 600 N/mm ² .
3	GLAND	Ductile cast iron - SG500/7, tensile strength - 500 N/mm ² .
4	PISTON	EN8D/C45 round bars, tensile strength - 650 N/mm ² .
5	REAR CLEVIS	EN8D/C45 round bars, tensile strength - 650 N/mm ² .
6	FRONT CLEVIS	EN8D/C45 round bars, tensile strength - 650 N/mm ² .
7	PISTON NUT	Gr 6 = Nylock nut material UTS = 600N/mm ² .
8	CLEVIS PIN	EN24 – toughened, BS970 round bars, tensile strength - 750 N/mm ² .
9	BETA PIN	Spring steel for durability and ease of installation/removal..
10	PISTON SEAL	Double acting high pressure, heavy duty seal comprising an elastomeric profile seal ring, two back up rings & two guide rings. K-DAS piston seal.
11	PISTON O-RING	NBR O-ring, acrylonitrile-butadiene rubber (nitrile rubber).
12	PISTON BACK UP RING	PTFE back up ring, polytetrafluoroethylene, internal and external high pressure application, reciprocating and rotating movement, capable of large temperature fluctuations, static and dynamic suited.
13	ROD PRESSURE SEAL U-CUP	Double lip single acting seal with acetal polyamide back up ring for high pressure applications, abrasive and wear resistant, compensates deflections of piston rod, restricts air and dirt entry to system, suited to sudden load and high pressure, simple installation.
14	WIPER SEAL	Wiper seal ensures that foreign matter is not introduced into the system, PU material, compact design and ease of installation.
15	GLAND O-RING	NBR O-ring, acrylonitrile-butadiene rubber (nitrile rubber).
16	GLAND BACK UP RING	PTFE back up ring, polytetrafluoroethylene, internal and external high pressure application, reciprocating and rotating movement, capable of large temperature fluctuations, static and dynamic suited.
17	ROD SEAL BACK UP RING	PTFE back up ring, polytetrafluoroethylene, internal and external high pressure application, reciprocating and rotating movement, capable of large temperature fluctuations, static and dynamic suited.

FEMALE CLEVIS (FORK) Cylinders Installation Dimensions



Bore mm	Rod mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	J mm	K mm	L mm	M mm	N mm	P mm	Q mm	R mm
40	22	50	54	19	45	45	33	19.1	45	22	45	22	32	46	32	67
50	32	60	64	29	53	50	54	25.5	65	29	52	28	51	67	32	98
63	40	73	74	36	53	50	54	25.5	65	29	60	28	51	70	35	98
75	40	85	84	36	53	50	54	25.5	65	29	60	28	48	67	35	98
90	45	102	102	NA	53	63	54	25.5	65	29	68	28	47	66	35	91
100	45	115	115	41	53	63	54	25.5	65	29	68	28	45	64	30	98
100	50	115	115	41	53	63	54	25.5	65	29	68	28	45	64	30	98
125	50	140	140	NA	53	63	54	25.5	65	29	68	28	45	64	27	91
125	63	140	140	NA	53	63	54	25.5	65	29	68	28	45	64	27	91

Bore mm	Rod mm	S-Thread inch	T-Thread inch	U mm	V mm	W mm	U1 mm	V1 mm	W1 mm
40	22	3/4" -16UNF	9/16"-18UNF	46	19.05	59	46	19.1	59
50	32	1-1/8" -12UNF	9/16"-18UNF	66	25.4	81	53	25.4	68
63	40	1-1/8" -12UNF	3/4" - 16UNF	66	25.4	81	61	25.4	76
75	40	1-3/8" -12UNF	3/4" - 16UNF	66	25.4	81	61	25.4	76
90	45	1-3/8" -12UNF	3/4" - 16UNF	66	25.4	81	69	25.4	84
100	45	1-3/8" -12UNF	3/4" - 16UNF	66	25.4	81	69	25.4	84
100	50	1-3/8" -12UNF	3/4" - 16UNF	66	25.4	81	69	25.4	84
125	50	1-3/8" -12UNF	3/4" - 16UNF	66	25.4	81	69	25.4	84
125	63	1-3/8" -12UNF	3/4" - 16UNF	66	25.4	81	69	25.4	84

Where:

For Bore 40mm: A= Stroke+241

Otherwise: A= Stroke+311

- Dimensions mentioned in inches are only for reference. Cylinders will be supplied in metric sizes.

FEMALE CLEVIS (FORK) Cylinders



PART NO.	Bore Diameter	Stroke	Rod Diameter	Close length	Open Length	Port Size	Pin Diameter	Weight
40mm Bore Cylinder								
DC13991-01	40mm- 1 1/2"	51mm - 2"	22mm - 7/8"	292mm - 11 1/2"	343mm - 13 1/2"	9/16" UN O-Ring	19.05mm - 3/4"	6.4kg
DC13992-01		102mm - 4"		343mm - 13 1/2"	444mm - 17 1/2"			6.7kg
DC13993-01		152mm - 6"		393mm - 15 1/2"	546mm - 21 1/2"			7.0kg
DC13994-01		203mm - 8"		444mm - 17 1/2"	647mm - 25 1/2"			7.3kg
DC13995-01		254mm - 10"		495mm - 19 1/2"	749mm - 29 1/2"			7.5kg
DC13996-01		305mm - 12"		546mm - 21 1/2"	851mm - 33 1/2"			7.8kg
DC15183		356mm - 14"		597mm - 23 1/2"	953mm - 37 1/2"			8.0kg
DC13997-01		406mm - 16"		647mm - 25 1/2"	1053mm - 41 1/2"			8.3kg
DC13998-01		457mm - 18"		698mm - 27 1/2"	1155mm - 45 1/2"			8.6kg
DC13999-01		508mm - 20"		749mm - 29 1/2"	1257mm - 49 1/2"			8.9kg
DC15184		559mm - 22"		800mm - 31 1/2"	1359mm - 53 1/2"			9.2kg
DC14000-01		610mm - 24"		851mm - 33 1/2"	1460mm - 57 1/2"			9.4kg
DC14001-01		762mm - 30"		1003mm - 39 1/2"	1765mm - 69 1/2"			10.2kg
DC14002-01		914mm - 36"		1155mm - 45 1/2"	2069mm - 81 1/2"			11.0kg
DC14003-01		1219mm - 48"		1460mm - 57 1/2"	2679mm - 105 1/2"			13.5kg
50mm Bore Cylinder								
DC14010-01	50mm - 2"	51mm - 2"	32mm - 1 1/4"	362mm - 14 1/4"	413mm - 16 1/4"	9/16" UN O-Ring	25.4mm - 1"	6.6kg
DC14011-01		102mm - 4"		413mm - 16 1/4"	514mm - 20 1/4"			7.4kg
DC14012-01		152mm - 6"		463mm - 18 1/4"	616mm - 24 1/4"			8.2kg
DC14431		203mm - 8"		514mm - 20 1/4"	717mm - 28 1/4"			9.0kg
DC14430		254mm - 10"		565mm - 22 1/4"	819mm - 32 1/4"			9.8kg
DC14099-01		305mm - 12"		616mm - 24 1/4"	921mm - 36 1/4"			10.6kg
DC14100-01		356mm - 14"		667mm - 26 1/4"	1022mm - 40 1/4"			11.2kg
DC14013-01		406mm - 16"		717mm - 28 1/4"	1123mm - 44 1/4"			12.2kg
DC14429		457mm - 18"		768mm - 30 1/4"	1225mm - 48 1/4"			13.0kg
DC14014-01		508mm - 20"		819mm - 32 1/4"	1327mm - 52 1/4"			13.8kg
DC14015-01		559mm - 22"		870mm - 34 1/4"	1429mm - 56 1/4"			14.6kg
DC14428		610mm - 24"		921mm - 36 1/4"	1530mm - 60 1/4"			15.4kg
DC14016-01		660mm - 26"		971mm - 38 1/4"	1631mm - 64 1/4"			16.2kg
DC14017-01		711mm - 28"		1022mm - 40 1/4"	1733mm - 68 1/4"			17.0kg
DC14018-01		762mm - 30"		1073mm - 42 1/4"	1835mm - 72 1/4"			17.8kg
DC14019-01		914mm - 36"		1225mm - 48 1/4"	2139mm - 84 1/4"			20.2kg
DC14020-01		1067mm - 42"		1378mm - 54 1/4"	2445mm - 96 1/4"			22.6kg
DC14427		1219mm - 48"		1530mm - 60 1/4"	2749mm - 108 1/4"			25.0kg

- Dimensions mentioned in inches are only for reference. Cylinders will be supplied in metric sizes.
- For ordering please select part no & required quantity and email to info@dantal.in.

FEMALE CLEVIS (FORK) Cylinders

PART NO.	Bore Diameter	Stroke	Rod Diameter	Close length	Open Length	Port Size	Pin Diameter	Weight				
63mm Bore Cylinder												
DC14426	63mm - 2 1/2"	51mm - 2"	40mm - 1 1/2"	362mm - 14 1/4"	413mm - 16 1/4"	3/4" UN O-Ring	25.4mm - 1"	8.6kg				
DC14021-01		102mm - 4"		413mm - 16 1/4"	514mm - 20 1/4"			9.1kg				
DC14425		152mm - 6"		463mm - 18 1/4"	616mm - 24 1/4"			9.8kg				
DC13768-01		203mm - 8"		514mm - 20 1/4"	717mm - 28 1/4"			10.8kg				
DC14022-01		254mm - 10"		565mm - 22 1/4"	819mm - 32 1/4"			11.9kg				
DC13819-01		305mm - 12"		616mm - 24 1/4"	921mm - 36 1/4"			12.8kg				
DC14023-01		356mm - 14"		667mm - 26 1/4"	1022mm - 40 1/4"			13.6kg				
DC13769-01		406mm - 16"		717mm - 28 1/4"	1123mm - 44 1/4"			14.1kg				
DC13820-01		457mm - 18"		768mm - 30 1/4"	1225mm - 48 1/4"			14.8kg				
DC13821-01		508mm - 20"		819mm - 32 1/4"	1327mm - 52 1/4"			15.7kg				
DC14024-01		559mm - 22"		870mm - 34 1/4"	1429mm - 56 1/4"			16.6kg				
DC14063-01		610mm - 24"		921mm - 36 1/4"	1530mm - 60 1/4"			17.6kg				
DC14025-01		660mm - 26"		971mm - 38 1/4"	1631mm - 64 1/4"			18.6kg				
DC14026-01		711mm - 28"		1022mm - 40 1/4"	1733mm - 68 1/4"			19.7kg				
DC14027-01		762mm - 30"		1073mm - 42 1/4"	1835mm - 72 1/4"			20.6kg				
DC14028-01		914mm - 36"		1225mm - 48 1/4"	2139mm - 84 1/4"			23.2kg				
DC14424		1067mm - 42"		1378mm - 54 1/4"	2445mm - 96 1/4"			26.2kg				
DC14423		1219mm - 48"		1530mm - 60 1/4"	2749mm - 108 1/4"			29.1kg				
75mm Bore Cylinder												
DC14422		75mm - 3"		51mm - 2"	40mm - 1 1/2"			362mm - 14 1/4"	413mm - 16 1/4"	3/4" UN O-Ring	25.4mm - 1"	11.6kg
DC14029-01	102mm - 4"		413mm - 16 1/4"	514mm - 20 1/4"		12.6kg						
DC14030-01	152mm - 6"		463mm - 18 1/4"	616mm - 24 1/4"		13.4kg						
DC13822-01	203mm - 8"		514mm - 20 1/4"	717mm - 28 1/4"		14.5kg						
DC14031-01	254mm - 10"		565mm - 22 1/4"	819mm - 32 1/4"		15.5kg						
DC13823-01	305mm - 12"		616mm - 24 1/4"	921mm - 36 1/4"		16.7kg						
DC14032-01	356mm - 14"		667mm - 26 1/4"	1022mm - 40 1/4"		17.4kg						
DC14166-01	406mm - 16"		717mm - 28 1/4"	1123mm - 44 1/4"		18.5kg						
DC14127-01	457mm - 18"		768mm - 30 1/4"	1225mm - 48 1/4"		19.3kg						
DC14033-01	508mm - 20"		819mm - 32 1/4"	1327mm - 52 1/4"		20.5kg						
DC14034-01	559mm - 22"		870mm - 34 1/4"	1429mm - 56 1/4"		21.6kg						
DC14101-01	610mm - 24"		921mm - 36 1/4"	1530mm - 60 1/4"		22.7kg						
DC14421	660mm - 26"		971mm - 38 1/4"	1631mm - 64 1/4"		23.9kg						
DC14420	711mm - 28"		1022mm - 40 1/4"	1733mm - 68 1/4"		25.2kg						
DC14419	762mm - 30"		1073mm - 42 1/4"	1835mm - 72 1/4"		26.4kg						
DC14418	914mm - 36"		1225mm - 48 1/4"	2139mm - 84 1/4"		30.0kg						
DC14417	1067mm - 42"		1378mm - 54 1/4"	2445mm - 96 1/4"		33.3kg						
DC14416	1219mm - 48"		1530mm - 60 1/4"	2749mm - 108 1/4"		36.9kg						
90mm Bore Cylinder												
DC14555	90mm - 3 1/2"		152mm - 6"	45mm - 1 3/4"		463mm - 18 1/4"	616mm - 24 1/4"	3/4" UN O-Ring	25.4mm - 1"			18.1kg
DC14556		203mm - 8"	514mm - 20 1/4"		717mm - 28 1/4"	19.4kg						
DC14557		254mm - 10"	565mm - 22 1/4"		819mm - 32 1/4"	20.7kg						
DC14415		305mm - 12"	616mm - 24 1/4"		921mm - 36 1/4"	22.2kg						
DC14558		356mm - 14"	667mm - 26 1/4"		1022mm - 40 1/4"	23.7kg						
DC14559		406mm - 16"	717mm - 28 1/4"		1123mm - 44 1/4"	24.2kg						
DC14560		457mm - 18"	768mm - 30 1/4"		1225mm - 48 1/4"	25.7kg						
DC14561		508mm - 20"	819mm - 32 1/4"		1327mm - 52 1/4"	27.2kg						
DC14562		610mm - 24"	921mm - 36 1/4"		1530mm - 60 1/4"	30.2kg						
DC14563		762mm - 30"	1073mm - 42 1/4"		1835mm - 72 1/4"	35.0kg						
DC14564		914mm - 36"	1225mm - 48 1/4"		2139mm - 84 1/4"	39.5kg						
DC14565		1067mm - 42"	1378mm - 54 1/4"		2445mm - 96 1/4"	44.0kg						
DC14566		1219mm - 48"	1530mm - 60 1/4"		2749mm - 108 1/4"	48.5kg						

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FEMALE CLEVIS (FORK) Cylinders

PART NO.	Bore Diameter	Stroke	Rod Diameter	Close length	Open Length	Port Size	Pin Diameter	Weight
100mm Bore Cylinder								
DC14414	100mm - 4"	203mm - 8"	45mm - 1 3/4"	514mm - 20 1/4"	717mm - 28 1/4"	3/4" UN O-Ring	25.4mm - 1"	22.0kg
DC14567		254mm - 10"		565mm - 22 1/4"	819mm - 32 1/4"			23.5kg
DC14035-01		305mm - 12"		616mm - 24 1/4"	921mm - 36 1/4"			25.0kg
DC14569		356mm - 14"		667mm - 26 1/4"	1022mm - 40 1/4"			26.5kg
DC14036-01		406mm - 16"		717mm - 28 1/4"	1123mm - 44 1/4"			28.0kg
DC14568		457mm - 18"		768mm - 30 1/4"	1225mm - 48 1/4"			29.7kg
DC14570		508mm - 20"		819mm - 32 1/4"	1327mm - 52 1/4"			31.4kg
DC13824-01		610mm - 24"		921mm - 36 1/4"	1530mm - 60 1/4"			38.3kg
DC14571		762mm - 30"		1073mm - 42 1/4"	1835mm - 72 1/4"			40.7kg
DC14413		914mm - 36"		1225mm - 48 1/4"	2139mm - 84 1/4"			45.7kg
DC14412		1067mm - 42"	1378mm - 54 1/4"	2445mm - 96 1/4"	50.7kg			
DC14411		1219mm - 48"	1530mm - 60 1/4"	2749mm - 108 1/4"	55.6kg			
DC14809		610mm - 24"	50mm - 2"	921mm - 36 1/4"	1530mm - 60 1/4"			37.6kg
DC14810		762mm - 30"		1073mm - 42 1/4"	1835mm - 72 1/4"			42.0kg
DC14811		914mm - 36"		1225mm - 48 1/4"	2139mm - 84 1/4"			48.0kg
DC14812		1067mm - 42"		1378mm - 54 1/4"	2445mm - 96 1/4"			52.5kg
DC14813	1219mm - 48"	1530mm - 60 1/4"		2749mm - 108 1/4"	58.0kg			
DC14813	1219mm - 48"	1530mm - 60 1/4"		2749mm - 108 1/4"	58.0kg			
125mm Bore Cylinder								
DC14572	125mm - 5"	203mm - 8"	50mm - 2"	514mm - 20 1/4"	717mm - 28 1/4"	3/4" UN O-Ring	25.4mm - 1"	28.5kg
DC14573		305mm - 12"		616mm - 24 1/4"	921mm - 36 1/4"			32.7kg
DC14574		406mm - 16"		717mm - 28 1/4"	1123mm - 44 1/4"			36.9kg
DC14575		457mm - 18"		768mm - 30 1/4"	1225mm - 48 1/4"			39.0kg
DC14576		508mm - 20"		819mm - 32 1/4"	1327mm - 52 1/4"			43.4kg
DC14577		610mm - 24"	63mm - 2 1/2"	921mm - 36 1/4"	1530mm - 60 1/4"			53.0kg
DC14578		762mm - 30"		1073mm - 42 1/4"	1835mm - 72 1/4"			60.5kg
DC14579		914mm - 36"		1225mm - 48 1/4"	2139mm - 84 1/4"			68.2kg
DC14580		1067mm - 42"		1378mm - 54 1/4"	2445mm - 96 1/4"			75.9kg
DC14410		1219mm - 48"		1530mm - 60 1/4"	2749mm - 108 1/4"			83.2kg

- Dimensions mentioned in inches are only for reference. Cylinders will be supplied in metric sizes.
- For ordering please select part no & required quantity and email to info@dantal.in.

MALE CLEVIS

Cylinders Design & Specifications

Double Acting Front End Loader Cylinder
With 2 Ports in cylinder.

Colour:

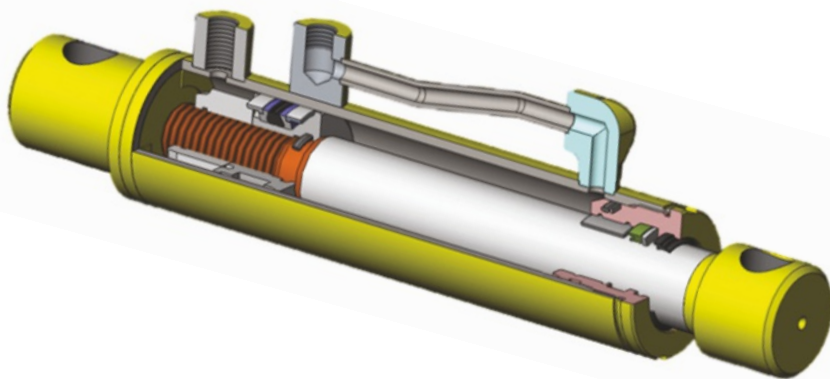
- Industrial Gloss Black.
- Industrial Gloss Yellow.

Working Pressure : 210 Bar - 3045 PSI

Cylinder Test Pressure : 315 Bar - 4568 PSI

Seals Maximum Operating Pressure and Conditions:

- Pressures: 414 Bar - 6000 PSI
- Temperature: -30 deg C to +110 deg C
- Speed: 0.5 Meters per Second
- Shock and load holding Capacity
- Double acting K-DAS piston seal providing positive displacement under all rated pressure situations



Rod Material:

- EN8D/C45 round bar
- Chrome Thickness: 20 to 30 Microns hard chromed piston rod for superior corrosion resistance

Tube Material:

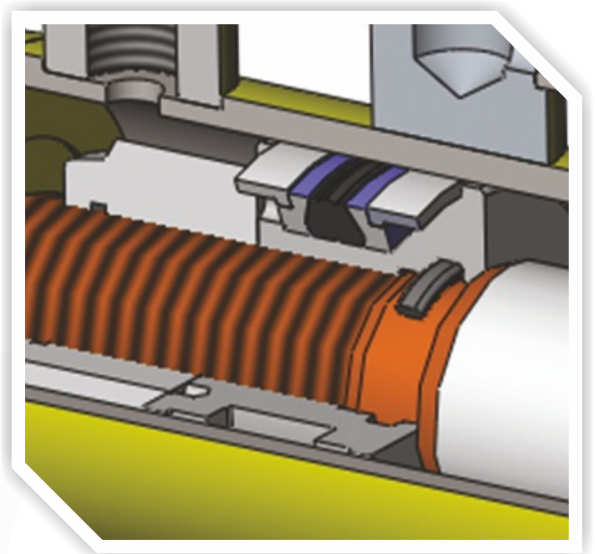
- CDS ST52/E355 steel tube • Seamless steel tube accurately honed to ensure smooth operation and extended seal life

Gland, Piston, Front Clevis, End Cap Material:

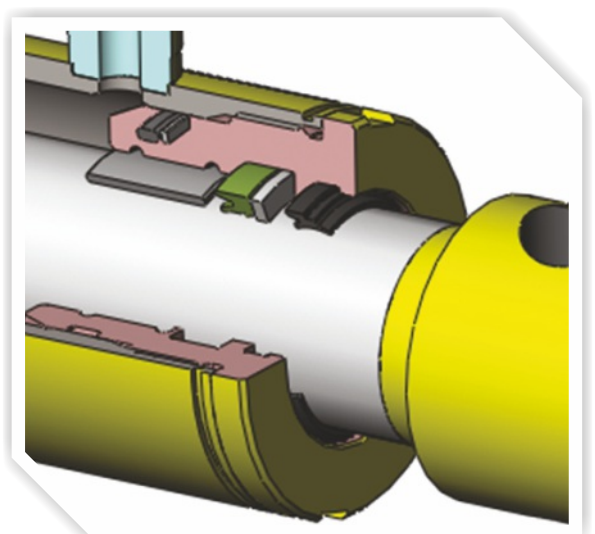
- EN8D/C45 tensile strength - 650 N/mm²

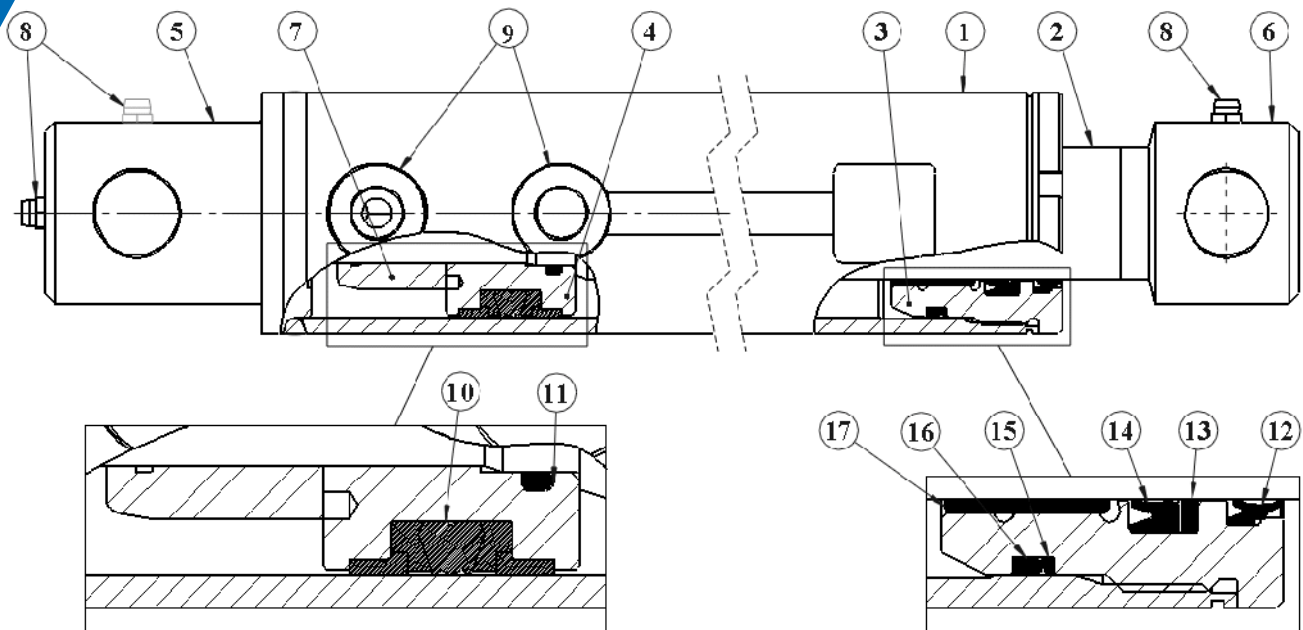


Seal arrangement Cap End Side



Seals arrangement Rod Eye Side

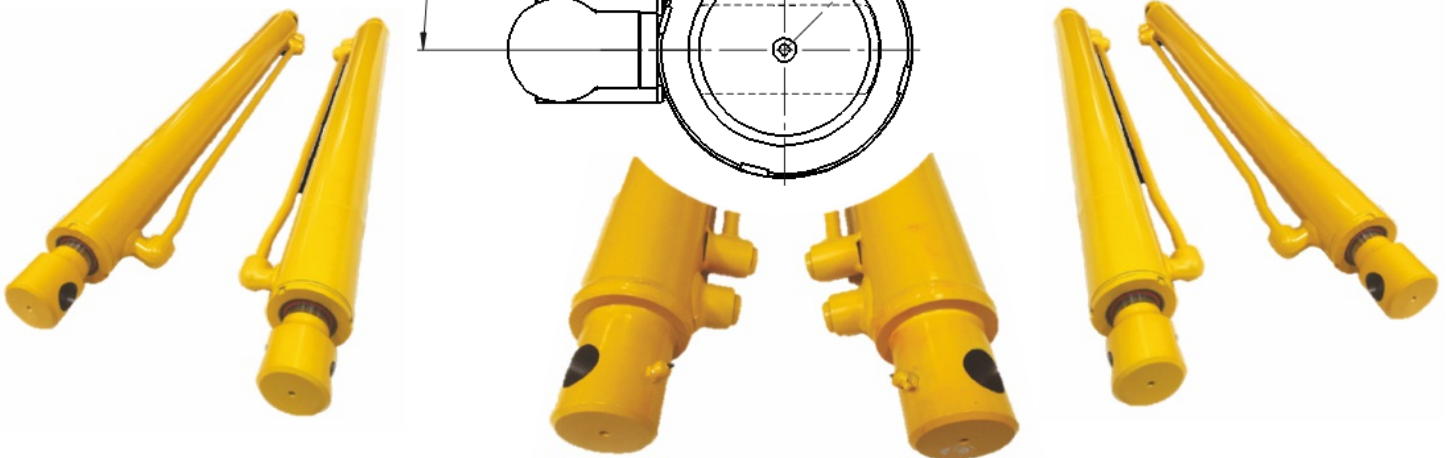
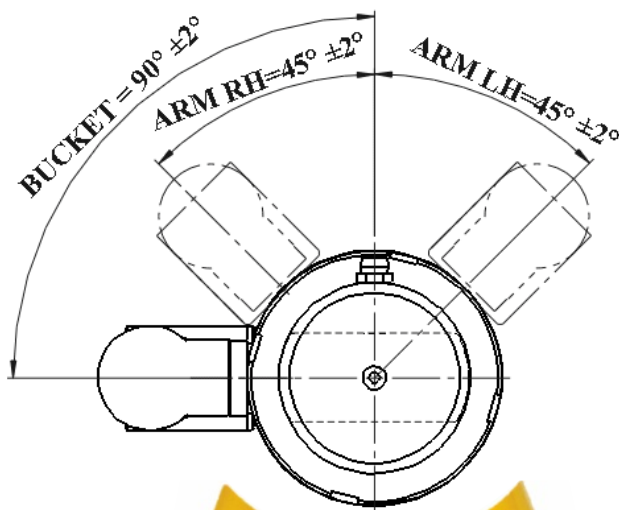
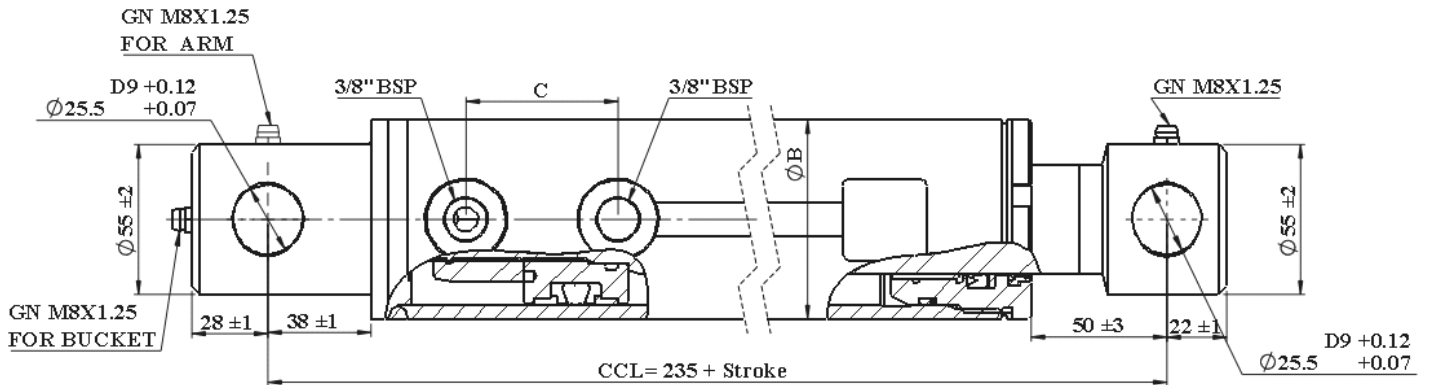




No	PART	DESCRIPTION
1	CYLINDER TUBE	CDS ST52/E355 seamless steel tube, accurately honed to ensure smooth operation and extended seal life.
2	PISTON ROD	High precision grounded, EN8D/C45 round bars, hard chrome plated with deposit of 20-30 microns, tensile strength – 600 N/mm ² .
3	GLAND	Ductile cast iron - SG500/7, tensile strength - 500 N/mm ² .
4	PISTON	EN8D/C45 round bars, tensile strength - 650 N/mm ² .
5	REAR CLEVIS	EN8D/C45 round bars, tensile strength - 650 N/mm ² .
6	FRONT CLEVIS	EN8D/C45 round bars, tensile strength - 650 N/mm ² .
7	PISTON NUT	Gr 6 = Nylock nut material UTS = 600N/mm ² .
8	GREASING NIPPLE	Grease nipples M8X1.25mm .
9	PORTS	3/8" BSP FEMALE PORT
10	PISTON SEAL	Double acting high pressure, heavy duty seal comprising an elastomeric profile seal ring, two back up rings & two guide rings. K-DAS piston seal.
11	PISTON O-RING	NBR O-ring, acrylonitrile-butadiene rubber (nitrile rubber).
12	WIPER SEAL	Wiper seal ensures that foreign matter is not introduced into the system, PU material, compact design and ease of installation.
13	ROD SEAL BACK UP RING	PTFE back up ring, polytetrafluoroethylene, internal and external high pressure application, reciprocating and rotating movement, capable of large temperature fluctuations, static and dynamic suited.
14	ROD PRESSURE SEAL U-CUP	Double lip single acting seal with acetal polyamide back up ring for high pressure applications, abrasive and wear resistant, compensates deflections of piston rod, restricts air and dirt entry to system, suited to sudden load and high pressure, simple installation.
15	GLAND BACK UP RING	PTFE back up ring, polytetrafluoroethylene, internal and external high pressure application, reciprocating and rotating movement, capable of large temperature fluctuations, static and dynamic suited.
16	GLAND O-RING	NBR O-ring, acrylonitrile-butadiene rubber (nitrile rubber).
17	RECIPOCATING BUSH	DP4 is a composite bearing for high duty oil lubricated hydraulic application. The steel backing provides mechanical strength & PTFE & Sinter Bronze layer at mating surface is capable for reciprocating and rotating movement, temperature fluctuations, static and dynamic suited.

MALE CLEVIS

Cylinders Installation Dimensions



Bore mm	Rod mm	B mm	C mm	CYLINDER TYPE
63	40	73	56	ARM, BUCKET
75	45	85	55	ARM, BUCKET

Machining Tolerances:

- All threads machined to 2A/B specification
- All pin holes machined to D9 tolerance
- All machine surface finishes to be 3.2um Ra.

MALE CLEVIS Cylinders



PART NO.	Cylinder Type	Bore Diameter	Stroke	Rod Diameter	Close length	Open Length	Port Size	Pin Diameter	Weight
63mm Bore Cylinders									
DC13908-01	Bucket	63mm - 2 1/2"	406mm - 16"	40mm - 1 1/2"	641mm - 25 1/4"	1047mm - 41 1/4"	3/8" BSP	25.4mm - 1"	14.1kg
DC14581	Bucket		565mm - 22 1/4"		800mm - 31 1/2"	1365mm - 53 3/4"			18.0kg
DC13988-01	Arm RH		762mm - 30"		997mm - 39 1/4"	1759mm - 69 1/4"			21.0kg
DC13909-01	Arm LH		762mm - 30"		997mm - 39 1/4"	1759mm - 69 1/4"			21.0kg
75mm Bore Cylinders									
DC13910-01	Bucket	75mm - 3"	406mm - 16"	45mm - 1 3/4"	641mm - 25 1/4"	1047mm - 41 1/4"	3/8" BSP	25.4mm - 1"	20.0kg
DC14582	Bucket		565mm - 22 1/4"		800mm - 31 1/2"	1365mm - 53 3/4"			23.0kg
DC13989-01	Arm RH		673mm - 26 1/2"		908mm - 35 3/4"	1581mm - 62 1/4"			25.0kg
DC13911-01	Arm LH		673mm - 26 1/2"		908mm - 35 3/4"	1581mm - 62 1/4"			25.0kg
DC13990-01	Arm RH		762mm - 30"		997mm - 39 1/4"	1759mm - 69 1/4"			27.0kg
DC13912-01	Arm LH		762mm - 30"		997mm - 39 1/4"	1759mm - 69 1/4"			27.0kg

- Dimensions mentioned in inches are only for reference. Cylinders will be supplied in metric sizes.
- For ordering please select part no & required quantity and email to info@dantal.in.

Toplink Hydraulic Cylinders

Product Design & Specifications

Double Acting Toplink Hydraulic Cylinder
With 4 Ports in cylinder for easy access.

Colour:

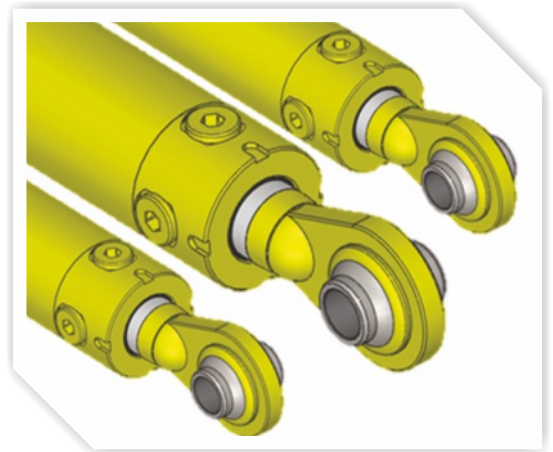
- Industrial Gloss Black. • Graphite Grey
- Industrial Gloss Yellow.

Working Pressure : 210 Bar - 3045 PSI

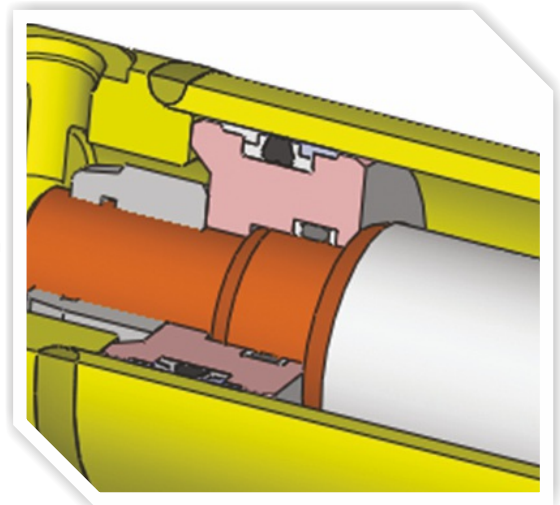
Cylinder Test Pressure : 315 Bar - 4568 PSI

Seals Maximum Operating Pressure and Conditions:

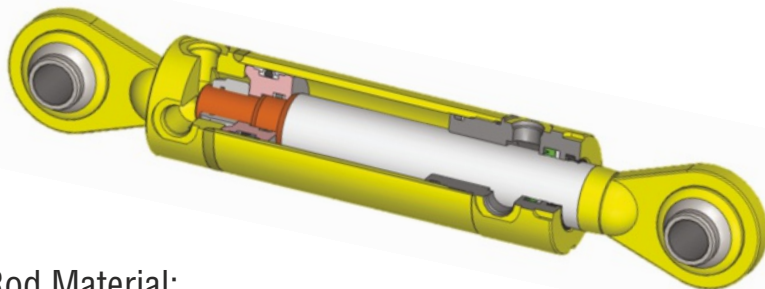
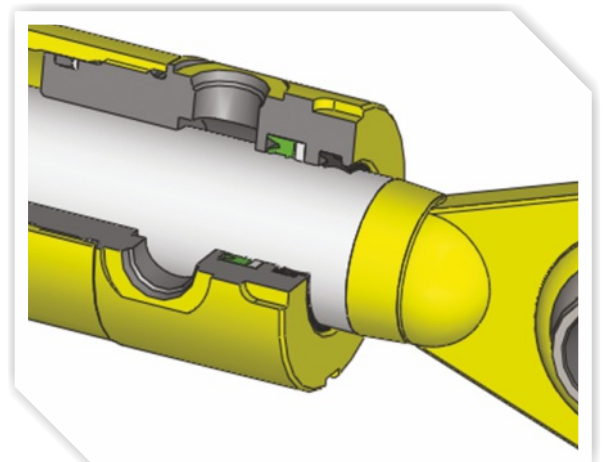
- Pressures: 414 Bar - 6000 PSI
- Temperature: -30 deg C to +110 deg C
- Speed: 0.5 Meters per Second
- Shock and load holding Capacity
- Double acting K-DAS piston seal providing positive displacement under all rated pressure situations



Seal arrangement Cap End Side



Seals arrangement Rod Eye Side



Rod Material:

- EN8D/C45 round bar
- Chrome Thickness: 20 to 30 Microns hard chromed piston rod for superior corrosion resistance

Tube Material:

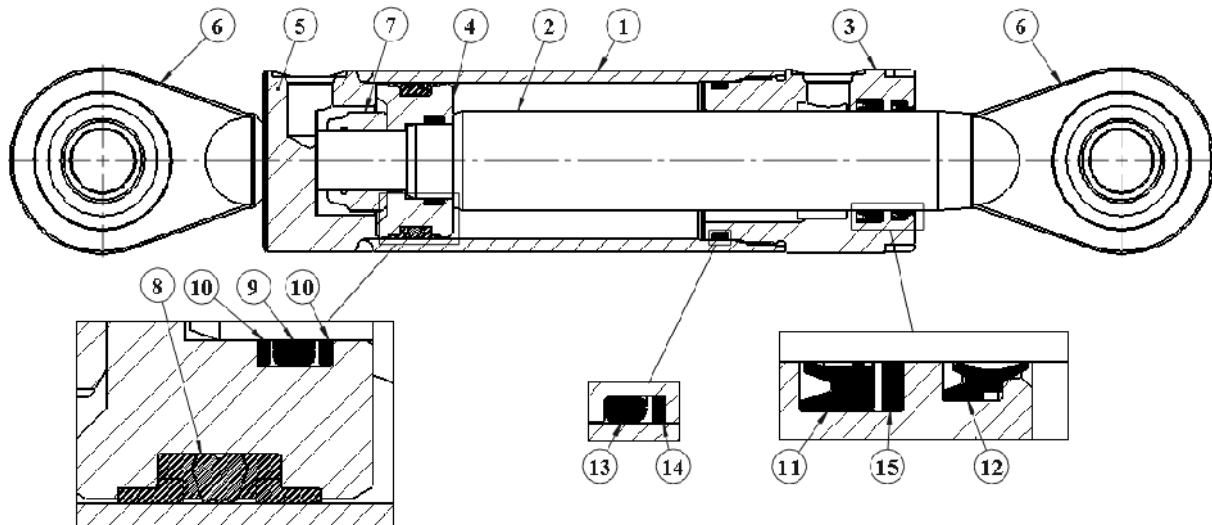
- CDS ST52/E355 steel tube • Seamless steel tube accurately honed to ensure smooth operation and extended seal life

Gland Material:

- SG IRON SG500/7 Spheroidal Graphite Cast Iron, tensile strength - 500 N/mm².

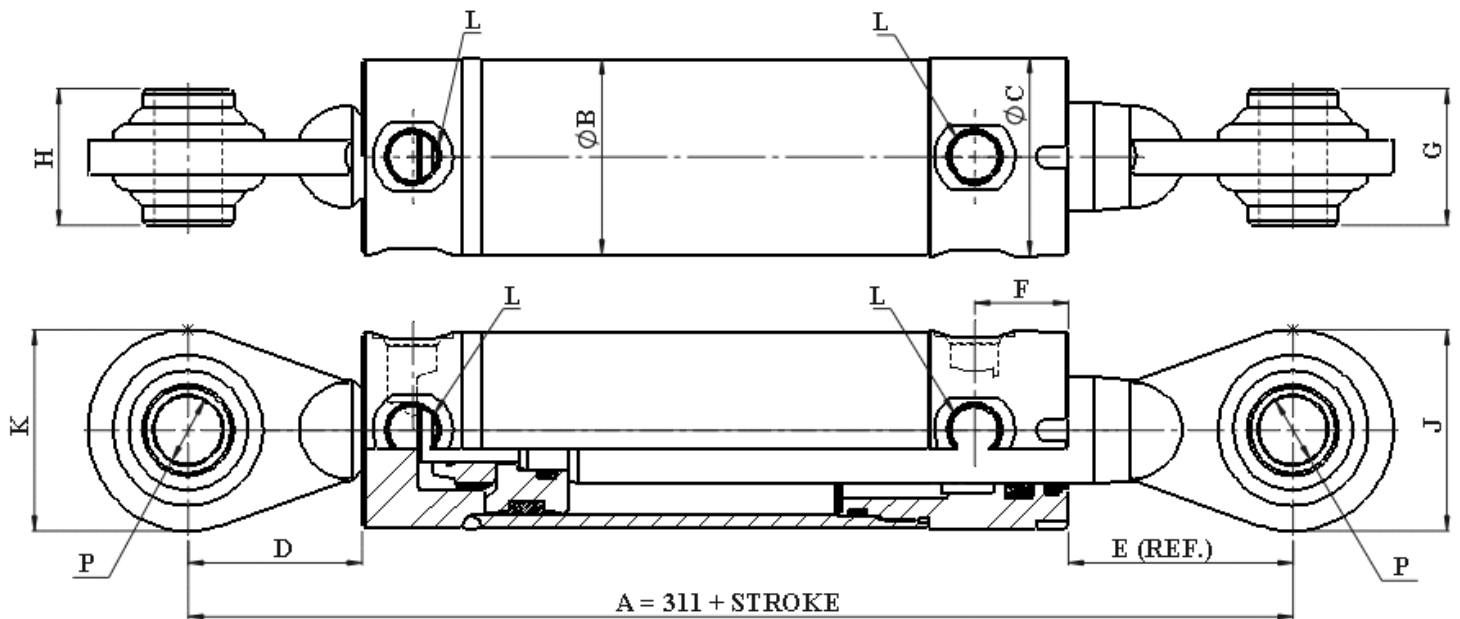
Piston, Front Clevis, Rear Clevis:

- EN8D/C45 tensile strength - 650 N/mm²



No	PART	DESCRIPTION
1	CYLINDER TUBE	CDS ST52/E355 seamless steel tube, accurately honed to ensure smooth operation and extended seal life.
2	PISTON ROD	High precision grounded, EN8D/C45 round bars, hard chrome plated with deposit of 20-30 microns, tensile strength – 600 N/mm ² .
3	GLAND	Ductile cast iron - SG500/7, tensile strength - 500 N/mm ² .
4	PISTON	EN8D/C45 round bars, tensile strength - 650 N/mm ² .
5	REAR END CAP	EN8D/C45 round bars, tensile strength - 650 N/mm ² .
6	CLEVIS	Ball Joint End for Easy of alignment.
7	PISTON NUT	Gr 6 = Nylock nut material UTS = 600N/mm ² .
8	PISTON SEAL	Double acting high pressure, heavy duty seal comprising an elastomeric profile seal ring, two back up rings & two guide rings. K-DAS piston seal.
9	PISTON O-RING	NBR O-ring, acrylonitrile-butadiene rubber (nitrile rubber).
10	PISTON BACK UP RING	PTFE back up ring, polytetrafluoroethylene, internal and external high pressure application, reciprocating and rotating movement, capable of large temperature fluctuations, static and dynamic suited.
11	ROD PRESSURE SEAL U-CUP	Double lip single acting seal with acetal polyamide back up ring for high pressure applications, abrasive and wear resistant, compensates deflections of piston rod, restricts air and dirt entry to system, suited to sudden load and high pressure, simple installation.
12	WIPER SEAL	Wiper seal ensures that foreign matter is not introduced into the system, PU material, compact design and ease of installation.
13	GLAND O-RING	NBR O-ring, acrylonitrile-butadiene rubber (nitrile rubber).
14	GLAND BACK UP RING	PTFE back up ring, polytetrafluoroethylene, internal and external high pressure application, reciprocating and rotating movement, capable of large temperature fluctuations, static and dynamic suited.
15	ROD SEAL BACK UP RING	PTFE back up ring, polytetrafluoroethylene, internal and external high pressure application, reciprocating and rotating movement, capable of large temperature fluctuations, static and dynamic suited.

Toplink Hydraulic Cylinders Installation Dimensions

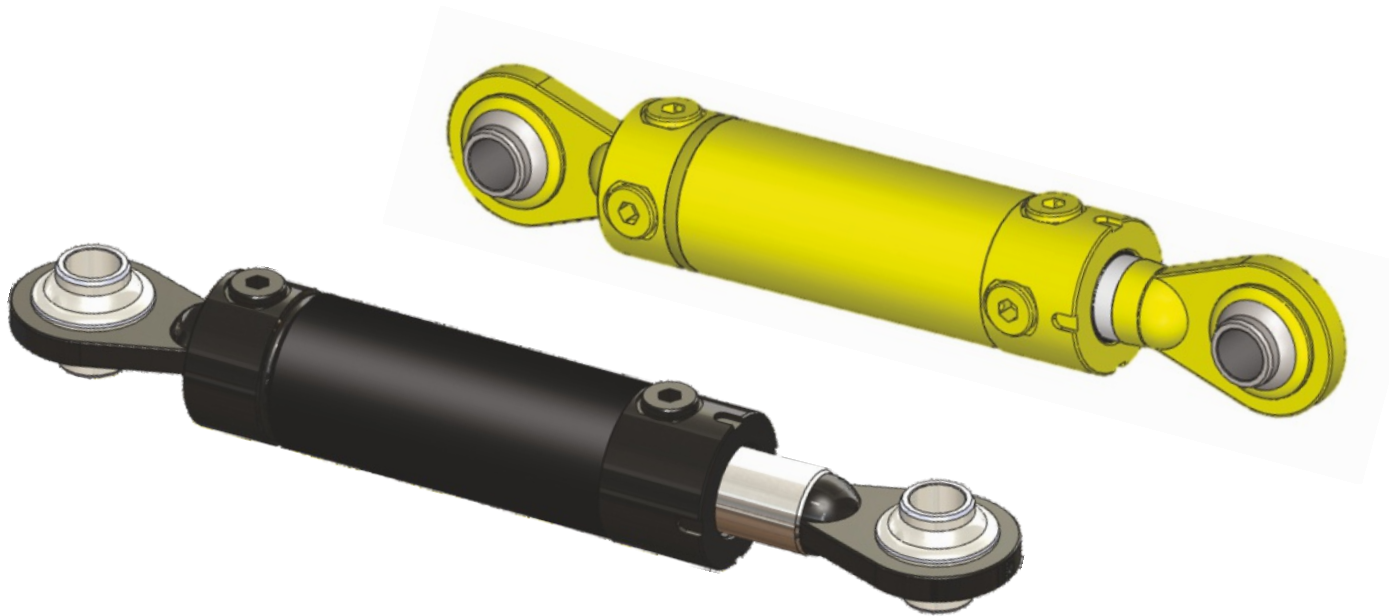


Bore mm	Rod mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	J mm	K mm	L -Thread inch	P mm
63	40	73	74	65	84	35	51	51	75	75	3/4" - 16UNF	25.4

Machining Tolerances:

- All threads machined to 2A/B specification
- All pin holes machined to D9 tolerance
- All machine surface finishes to be 3.2um Ra.

Toplink Hydraulic Cylinders



PART NO.	Bore Diameter	Stroke	Rod Diameter	Close length	Open Length	Port Size	Pin Diameter	Weight
63mm Bore Cylinders								
DC14610		102mm - 4"		413mm - 16 1/4"	514mm - 20 1/4"			9.1kg
DC14611		152mm - 6"		463mm - 18 1/4"	616mm - 24 1/4"			9.8kg
DC14612	63mm - 2 1/2"	203mm - 8"	40mm - 1 1/2"	514mm - 20 1/4"	717mm - 28 1/4"	3/4" UN O-Ring	25.4mm - 1"	10.8kg
DC14613		254mm - 10"		565mm - 22 1/4"	819mm - 32 1/4"			11.9kg
DC14859		305mm - 12"		616mm - 24 1/4"	921mm - 36 1/4"			12.8kg

- Dimensions mentioned in inches are only for reference. Cylinders will be supplied in metric sizes.
- For ordering please select part no & required quantity and email to info@dantal.in.

Hydraulic Cylinders Extension and Retraction Force



Cylinder Bore	Maximum Extension Force	Rod Size	Maximum Retraction Force	Pressure in PSI	Pressure in BAR
1 ½" - 40mm	2.1 tonne	7/8" - 22mm	1.4 tonne	2500	172
	2.6 tonne		1.8 tonne	3000	207
2" - 50mm	3.3 tonne	1 ¼" - 32mm	1.9 tonne	2500	172
	4.0 tonne		2.3 tonne	3000	207
2 ½" - 63mm	5.3 tonne	1 ½" - 40mm	3.1 tonne	2500	172
	6.4 tonne		3.7 tonne	3000	207
3" - 75mm	7.6 tonne	1 ½" - 40mm	5.4 tonne	2500	172
	9.1 tonne		6.5 tonne	3000	207
	7.6 tonne	1 ¾" - 45mm	4.8 tonne	2500	172
	9.1 tonne		5.8 tonne	3000	207
3 ½" - 90mm	10.7 tonne	1 ¾" - 45mm	7.9 tonne	2500	172
	13.1 tonne		9.8 tonne	3000	207
4" - 100mm	13.3 tonne	1 ¾" - 45mm	10.5 tonne	2500	172
	16.1 tonne		12.8 tonne	3000	207
	13.3 tonne	2" - 50mm	9.9 tonne	2500	172
	16.1 tonne		12.0 tonne	3000	207
5" - 125mm	21.3 tonne	2" - 50mm	17.9 tonne	2500	172
	25.7 tonne		21.6 tonne	3000	207
	21.3 tonne	2 ½" - 63mm	15.9 tonne	2500	172
	25.7 tonne		19.2 tonne	3000	207

- Dimensions mentioned in inches are only for reference. Cylinders will be supplied in metric sizes.

MANUFACTURING FACILITIES

Manesar Works : Cylinders



Manesar Works : Rod processing



Ghiloth Works : Special Cylinders



Bilaspur Works : Manifolds & Cylinders



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