

Product Specifications

Catford Yellow Line Industrial Grade Hydraulic Cylinders

Cylinder Type:

- Double Acting with Clevis ends

4 Port Cylinder:

- Allowing simple easy access around machinery brackets

Cylinder Working Pressure:

- 210 Bar - 3045 PSI

Cylinder Test Pressure:

- 315 Bar - 4568 PSI

Seals Maximum Operating Pressures and Conditions:

- Pressures: 414 Bar - 6000 PSI
- Temperature: -30°C to +110°C
- Speed: 0.5 Metres Per Second
- Shock and Load Holding Capabilities
- Double acting K-DAS piston seal providing positive displacement under all rated pressure situations



Rod Material & Hardening:

- EN8D/C45 round bar
- Toughened and Induction Hardened
- 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

End Head, Rod End and Piston Material:

- EN8D/C45 tensile strength - 650 N/mm²

Gland Material:

- SG IRON SG500/7 Spheroidal Graphite Cast Iron

Colour:

- Choice of Industrial Gloss Yellow or Industrial Gloss Black

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.



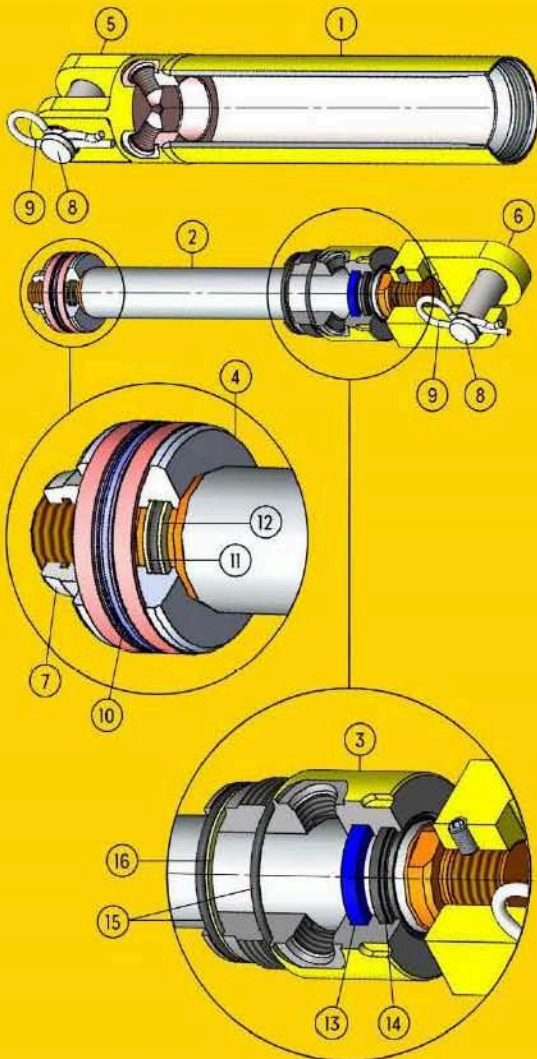
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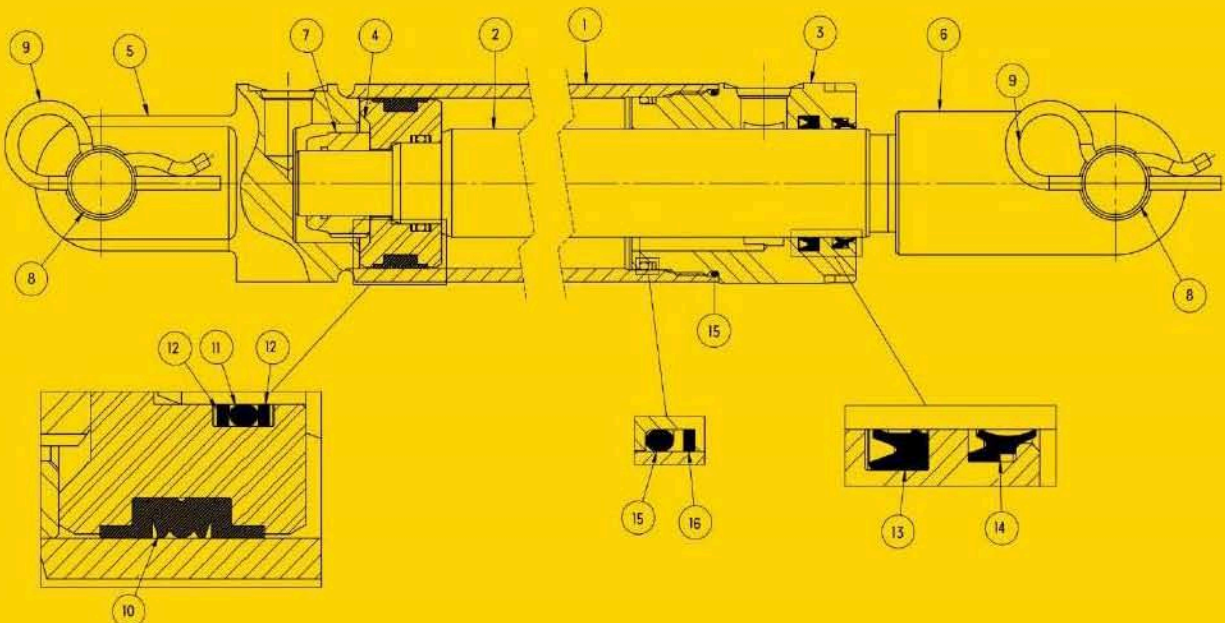
Part No.	Bore	Stroke	Rod diameter	Closed length	Open length	Port size	Pin diameter	Weight KG	Price Inc. GST
CRY152	1-1/2" 40mm	2" - 51mm	7/8" 22mm	11 1/2" - 292mm	13 1/2" - 343mm	9/16" UN "O" Ring	3/4" 19.05mm	6.4	\$425
CRY154		4" - 102mm		13 1/2" - 343mm	17 1/2" - 444mm			6.7	\$435
CRY156		6" - 152mm		15 1/2" - 393mm	21 1/2" - 546mm			7	\$440
CRY158		8" - 203mm		17 1/2" - 444mm	25 1/2" - 647mm			7.3	\$445
CRY1510		10" - 254mm		19 1/2" - 495mm	29 1/2" - 749mm			7.5	\$450
CRY1512		12" - 305mm		21 1/2" - 546mm	33 1/2" - 851mm			7.8	\$455
CRY1514		14" - 356mm		23 1/2" - 597mm	37 1/2" - 953mm			8.1	\$495
CRY1516		16" - 406mm		25 1/2" - 647mm	41 1/2" - 1053mm			8.3	\$505
CRY1518		18" - 457mm		27 1/2" - 698mm	45 1/2" - 1155mm			8.6	\$520
CRY1520		20" - 508mm		29 1/2" - 749mm	49 1/2" - 1257mm			8.9	\$525
CRY1522		22" - 559mm		31 1/2" - 800mm	53 1/2" - 1359mm			9.3	\$545
CRY1524		24" - 610mm		33 1/2" - 851mm	57 1/2" - 1460mm			9.4	\$570
CRY1530		30" - 762mm		39 1/2" - 1003mm	69 1/2" - 1765mm			10.2	\$605
CRY1536		36" - 914mm		45 1/2" - 1155mm	81 1/2" - 2069mm			11	\$670
CRY1548		48" - 1219mm		57 1/2" - 1460mm	105 1/2" - 2679mm			13.5	\$756
CRY22	2" 50mm	2" - 51mm	1-1/4" 32mm	14 1/4" - 362mm	16 1/4" - 413mm	9/16" UN "O" Ring	1" 25.4mm	6.6	\$435
CRY24		4" - 102mm		16 1/4" - 413mm	20 1/4" - 514mm			7.4	\$440
CRY26		6" - 152mm		18 1/4" - 463mm	24 1/4" - 616mm			8.2	\$445
CRY28		8" - 203mm		20 1/4" - 514mm	28 1/4" - 717mm			9	\$450
CRY210		10" - 254mm		22 1/4" - 565mm	32 1/4" - 819mm			9.8	\$455
CRY212		12" - 305mm		24 1/4" - 616mm	36 1/4" - 921mm			10.6	\$475
CRY214		14" - 356mm		26 1/4" - 667mm	40 1/4" - 1022mm			11.2	\$500
CRY216		16" - 406mm		28 1/4" - 717mm	44 1/4" - 1123mm			12.2	\$505
CRY218		18" - 457mm		30 1/4" - 768mm	48 1/4" - 1225mm			13	\$515
CRY220		20" - 508mm		32 1/4" - 819mm	52 1/4" - 1327mm			13.8	\$530
CRY222		22" - 559mm		34 1/4" - 870mm	56 1/4" - 1429mm			14.6	\$565
CRY224		24" - 610mm		36 1/4" - 921mm	60 1/4" - 1530mm			15.4	\$580
CRY226		26" - 660mm		38 1/4" - 971mm	64 1/4" - 1631mm			16.2	\$605
CRY228		28" - 711mm		40 1/4" - 1022mm	68 1/4" - 1733mm			17	\$670
CRY230		30" - 762mm		42 1/4" - 1073mm	72 1/4" - 1835mm			17.8	\$705
CRY236		36" - 914mm		48 1/4" - 1225mm	84 1/4" - 2139mm			20.2	\$730
CRY242		42" - 1067mm		54 1/4" - 1378mm	96 1/4" - 2445mm			22.6	\$815
CRY248		48" - 1219mm		60 1/4" - 1530mm	108 1/4" - 2749mm			25	\$840
CRY252	2-1/2" 63mm	2" - 51mm	1-1/2" 40mm	14 1/4" - 362mm	16 1/4" - 413mm	3/4" UN "O" Ring	1" 25.4mm	8.6	\$440
CRY254		4" - 102mm		16 1/4" - 413mm	20 1/4" - 514mm			9.1	\$445
CRY256		6" - 152mm		18 1/4" - 463mm	24 1/4" - 616mm			9.8	\$450
CRY258		8" - 203mm		20 1/4" - 514mm	28 1/4" - 717mm			10.8	\$455
CRY2510		10" - 254mm		22 1/4" - 565mm	32 1/4" - 819mm			11.9	\$465
CRY2512		12" - 305mm		24 1/4" - 616mm	36 1/4" - 921mm			12.8	\$480
CRY2514		14" - 356mm		26 1/4" - 667mm	40 1/4" - 1022mm			13.6	\$505
CRY2516		16" - 406mm		28 1/4" - 717mm	44 1/4" - 1123mm			14.1	\$510
CRY2518		18" - 457mm		30 1/4" - 768mm	48 1/4" - 1225mm			14.8	\$520
CRY2520		20" - 508mm		32 1/4" - 819mm	52 1/4" - 1327mm			15.7	\$535
CRY2522		22" - 559mm		34 1/4" - 870mm	56 1/4" - 1429mm			16.6	\$570
CRY2524		24" - 610mm		36 1/4" - 921mm	60 1/4" - 1530mm			17.6	\$585
CRY2526		26" - 660mm		38 1/4" - 971mm	64 1/4" - 1631mm			18.6	\$640
CRY2528		28" - 711mm		40 1/4" - 1022mm	68 1/4" - 1733mm			19.7	\$680
CRY2530		30" - 762mm		42 1/4" - 1073mm	72 1/4" - 1835mm			20.6	\$715
CRY2536		36" - 914mm		48 1/4" - 1225mm	84 1/4" - 2139mm			23.2	\$745
CRY2542	42" - 1067mm	54 1/4" - 1378mm	96 1/4" - 2445mm	26.2	\$895				
CRY2548	48" - 1219mm	60 1/4" - 1530mm	108 1/4" - 2749mm	29.1	\$980				

Part No.	Bore	Stroke	Rod diameter	Closed length	Open length	Port size	Pin diameter	Weight KG	Price Inc. GST
CRY32	3" 75mm	2" - 51mm	1-1/2" 40mm	14 1/4" - 362mm	16 1/4" - 413mm	3/4" UN "O" Ring	1" 25.4mm	11.6	\$445
CRY34		4" - 102mm		16 1/4" - 413mm	20 1/4" - 515mm			12.6	\$450
CRY36		6" - 152mm		18 1/4" - 463mm	24 1/4" - 616mm			13.4	\$455
CRY38		8" - 203mm		20 1/4" - 514mm	28 1/4" - 717mm			14.5	\$475
CRY310		10" - 254mm		22 1/4" - 565mm	32 1/4" - 819mm			15.5	\$505
CRY312		12" - 305mm		24 1/4" - 616mm	36 1/4" - 921mm			16.7	\$530
CRY314		14" - 356mm		26 1/4" - 667mm	40 1/4" - 1023mm			17.4	\$575
CRY316		16" - 406mm		28 1/4" - 717mm	44 1/4" - 1124mm			18.5	\$585
CRY318		18" - 457mm		30 1/4" - 768mm	48 1/4" - 1225mm			19.3	\$605
CRY320		20" - 508mm		32 1/4" - 819mm	52 1/4" - 1327mm			20.5	\$670
CRY322		22" - 559mm		34 1/4" - 870mm	56 1/4" - 1429mm			21.6	\$715
CRY324		24" - 610mm		36 1/4" - 921mm	60 1/4" - 1531mm			22.7	\$730
CRY326		26" - 660mm		38 1/4" - 971mm	64 1/4" - 1632mm			23.9	\$780
CRY328		28" - 711mm		40 1/4" - 1022mm	68 1/4" - 1733mm			25.2	\$800
CRY330		30" - 762mm		42 1/4" - 1073mm	72 1/4" - 1835mm			26.4	\$855
CRY336		36" - 914mm		48 1/4" - 1225mm	84 1/4" - 2139mm			30	\$910
CRY342		42" - 1067mm		54 1/4" - 1378mm	96 1/4" - 2445mm			33.3	\$999
CRY348		48" - 1219mm		60 1/4" - 1530mm	108 1/4" - 2749mm			36.9	\$1,130
CRY356	3-1/2" 90mm	6" - 152mm	1-3/4" 45mm	18 1/4" - 463mm	24 1/4" - 616mm	3/4" UN "O" Ring	1" 25.4mm	18.1	\$570
CRY358		8" - 203mm		20 1/4" - 514mm	28 1/4" - 717mm			19.7	\$575
CRY3510		10" - 254mm		22 1/4" - 565mm	32 1/4" - 819mm			21.2	\$630
CRY3512		12" - 305mm		24 1/4" - 616mm	36 1/4" - 921mm			22.8	\$670
CRY3514		14" - 356mm		26 1/4" - 667mm	40 1/4" - 1023mm			24.4	\$680
CRY3516		16" - 406mm		28 1/4" - 717mm	44 1/4" - 1124mm			25.9	\$705
CRY3518		18" - 457mm		30 1/4" - 768mm	48 1/4" - 1225mm			27.4	\$755
CRY3520		20" - 508mm		32 1/4" - 819mm	52 1/4" - 1327mm			29	\$780
CRY3524		24" - 610mm		36 1/4" - 921mm	60 1/4" - 1531mm			32.1	\$800
CRY3530		30" - 762mm		42 1/4" - 1073mm	72 1/4" - 1835mm			36.7	\$910
CRY3536		36" - 914mm		48 1/4" - 1225mm	84 1/4" - 2139mm			41.4	\$1,045
CRY3542		42" - 1067mm		54 1/4" - 1378mm	96 1/4" - 2445mm			46.1	\$1,135
CRY3548	48" - 1219mm	60 1/4" - 1530mm	108 1/4" - 2749mm	50.7	\$1,205				
CRY48	4" 100mm	8" - 203mm	1-3/4" 45mm	20 1/4" - 514mm	28 1/4" - 717mm	3/4" UN "O" Ring	1" 25.4mm	22	\$605
CRY410		10" - 254mm		22 1/4" - 565mm	32 1/4" - 819mm			23.5	\$670
CRY412		12" - 305mm		24 1/4" - 616mm	36 1/4" - 921mm			25	\$705
CRY414		14" - 356mm		26 1/4" - 667mm	40 1/4" - 1023mm			26.5	\$720
CRY416		16" - 406mm		28 1/4" - 717mm	44 1/4" - 1124mm			28	\$756
CRY418		18" - 457mm		30 1/4" - 768mm	48 1/4" - 1225mm			29.7	\$790
CRY420		20" - 508mm		32 1/4" - 819mm	52 1/4" - 1327mm			31.4	\$835
CRY424		24" - 610mm		36 1/4" - 921mm	60 1/4" - 1531mm			34.6	\$910
CRY430		30" - 762mm		42 1/4" - 1073mm	72 1/4" - 1835mm			39	\$999
CRY436		36" - 914mm		48 1/4" - 1225mm	84 1/4" - 2139mm			45	\$1,175
CRY442		42" - 1067mm		54 1/4" - 1378mm	96 1/4" - 2445mm			49.5	\$1,205
CRY448		48" - 1219mm		60 1/4" - 1530mm	108 1/4" - 2749mm			55	\$1,335
CRY58	5" 125mm	8" - 203mm	2" 50mm	20 1/4" - 514mm	28 1/4" - 717mm	3/4" UN "O" Ring	1" 25.4mm	31	\$999
CRY512		12" - 305mm		24 1/4" - 616mm	36 1/4" - 921mm			35	\$1,125
CRY516		16" - 406mm		28 1/4" - 717mm	44 1/4" - 1124mm			39.1	\$1,235
CRY518		18" - 457mm		30 1/4" - 768mm	48 1/4" - 1225mm			41.1	\$1,305
CRY520		20" - 508mm		32 1/4" - 819mm	52 1/4" - 1327mm			43.2	\$1,345
CRY524	5" 125mm	24" - 610mm	2-1/2" 63mm	36 1/4" - 921mm	60 1/4" - 1531mm	3/4" UN "O" Ring	1" 25.4mm	53	\$1,620
CRY530		30" - 762mm		42 1/4" - 1073mm	72 1/4" - 1835mm			60.5	\$1,800
CRY536		36" - 914mm		48 1/4" - 1225mm	84 1/4" - 2139mm			68.2	\$2,036
CRY542		42" - 1067mm		54 1/4" - 1378mm	96 1/4" - 2445mm			75.9	\$2,236
CRY548		48" - 1219mm		60 1/4" - 1530mm	108 1/4" - 2749mm			83.2	\$2,390
CRY68	6" 150mm	8" - 203mm	2-1/2" 63mm	20 1/4" - 514mm	28 1/4" - 717mm	3/4" UN "O" Ring	1-1/4" 31.75mm	36	\$1,660
CRY612		12" - 305mm		24 1/4" - 616mm	36 1/4" - 921mm			47	\$1,782
CRY616		16" - 406mm		28 1/4" - 717mm	44 1/4" - 1124mm			63	\$1,900
CRY620		20" - 508mm		32 1/4" - 819mm	52 1/4" - 1327mm			78	\$2,065
CRY624		24" - 610mm		36 1/4" - 921mm	60 1/4" - 1531mm			94	\$2,225
CRY630		30" - 762mm		42 1/4" - 1073mm	72 1/4" - 1835mm			117	\$2,460
CRY636		36" - 914mm		48 1/4" - 1225mm	84 1/4" - 2139mm			140	\$2,710
CRY648		48" - 1219mm		60 1/4" - 1530mm	108 1/4" - 2749mm			188	\$3,200

Clevis End Cylinder Product Diagram



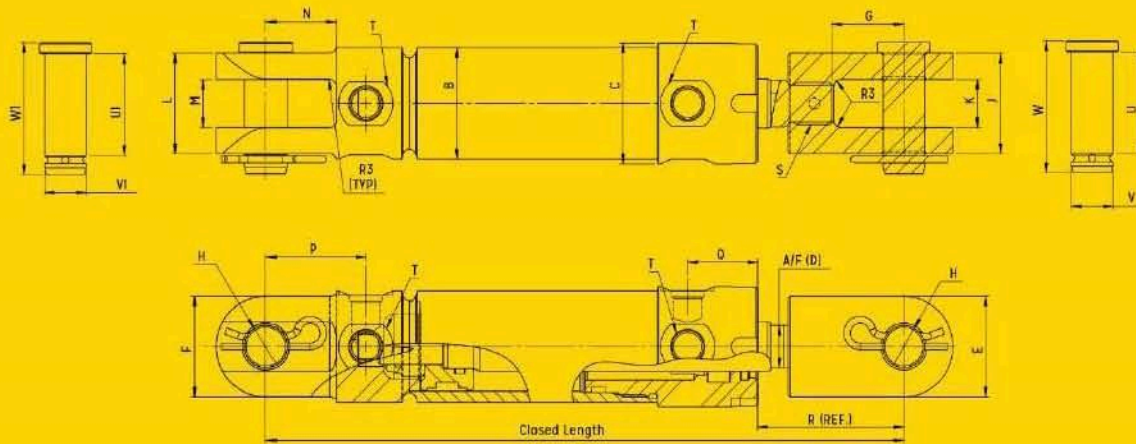
PART	DESCRIPTION
1	CYLINDER TUBE CDS ST52/E355 seamless steel tube, accurately honed to ensure smooth operation and extended seal life.
2	PISTON ROD High precision grounded, EN8D/C45 round bars, toughened and induction hardened, hard chrome plated with deposit of 20-30 microns, tensile strength - 600 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 + Nyloc 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.



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Clevis End Cylinder 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	S-THREAD inch	T-THREAD inch	U mm	V mm	W mm	UI mm	VI mm	WI mm
40	22	50	54	19	45	45	33	19.2	45	21.5	45	21.5	32	45.5	32	67	3/4"-16UNF	9/16"-18UNF	46	19.05	59	46	19.05	59
50	32	60	64	29	53	50	54	25.5	65	28.5	52	28	51	67	32	98	1-1/8"-12UNF	9/16"-18UNF	66	25.4	81	53	25.4	68
63	40	73	74	36	53	50	54	25.5	65	28.5	60	28	51	70	35	98	1-1/8"-12UNF	3/4"-16UNF	66	25.4	81	61	25.4	76
75	40	85	84	36	53	50	54	25.5	65	28.5	60	28	48	67	35	98	1-3/8"-12UNF	3/4"-16UNF	66	25.4	81	61	25.4	76
90	45	102	102	NA	53	63	54	25.4	65	28.5	68	28	47	66	35	91	1-3/8"-12UNF	3/4"-16UNF	66	25.4	81	69	25.4	84
100	45	115	115	41	53	63	54	25.5	65	28.5	68	28	45	64	30	98	1-3/8"-12UNF	3/4"-16UNF	66	25.4	81	69	25.4	84
125	50	140	140	NA	75	75	54	25.4	75	28.5	75	28	45	64	27	91	1-3/8"-12UNF	3/4"-16UNF	66	25.4	81	69	25.4	84
125	63	140	140	NA	75	75	54	25.4	75	28.5	75	28	45	64	27	91	1-3/8"-12UNF	3/4"-16UNF	66	25.4	81	69	25.4	84

Clevis End Cylinder Extension/Retraction Force

Cylinder Bore	Maximum Extension Force	Rod Size	Maximum Retraction Force	PSI
1 1/2" - 40mm	2.0 tonne	7/8" - 22mm	1.5 tonne	2500
1 1/2" - 40mm	2.4 tonne	7/8" - 22mm	1.8 tonne	3000
2" - 50mm	3.6 tonne	1 1/2" - 32mm	2.2 tonne	2500
2" - 50mm	4.3 tonne	1 1/2" - 32mm	2.6 tonne	3000
2 1/2" - 63mm	5.6 tonne	1 1/2" - 40mm	3.6 tonne	2500
2 1/2" - 63mm	6.7 tonne	1 1/2" - 40mm	4.3 tonne	3000
3" - 75mm	8.0 tonne	1 1/2" - 40mm	6.0 tonne	2500
3" - 75mm	9.6 tonne	1 1/2" - 40mm	7.2 tonne	3000
3 1/2" - 90mm	11.0 tonne	1 1/2" - 45mm	8.2 tonne	2500
3 1/2" - 90mm	13.1 tonne	1 1/2" - 45mm	9.8 tonne	3000
4" - 100mm	14.3 tonne	1 1/2" - 45mm	11.5 tonne	2500
4" - 100mm	17.1 tonne	1 1/2" - 45mm	13.8 tonne	3000
5" - 125mm	22.3 tonne	2" - 50mm	18.7 tonne	2500
5" - 125mm	26.7 tonne	2" - 50mm	22.4 tonne	3000
5" - 125mm	22.3 tonne	2 1/2" - 63mm	16.7 tonne	2500
5" - 125mm	26.7 tonne	2 1/2" - 63mm	20.0 tonne	3000

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Catford Yellow Line Industrial Grade Hydraulic Agricultural Cylinders

Cylinder Type:

* Double acting with clevis ends

4 Port Cylinder

* Allowing simple easy access around machinery brackets

Cylinder Working Pressure:

* 210 Bar - 3045 PSI

Cylinder Test Pressure

* 315 Bar - 4568 PSI

Clevis End Head with Ports, Rod End Clevis and Piston Material:

* EN8D/C45 tensile strength - 650 N/mm²

* Rod clevis and barrel clevis are fully machined, not foundry cast steel

Tube Material:

* CDS ST52/E355 steel tube

* Seamless steel tube accurately honed to ensure smooth operation and extended seal life



Seals Maximum Operating Pressures and Conditions

* Pressures: 414 Bar - 6000 PSI

* Temperature: -30°C to +110°C

* Speed: 0.5 metres per second

* Shock and load holding capabilities

* Double acting K-DAS piston seal providing positive displacement under all rated pressure situations

Machining Tolerances:

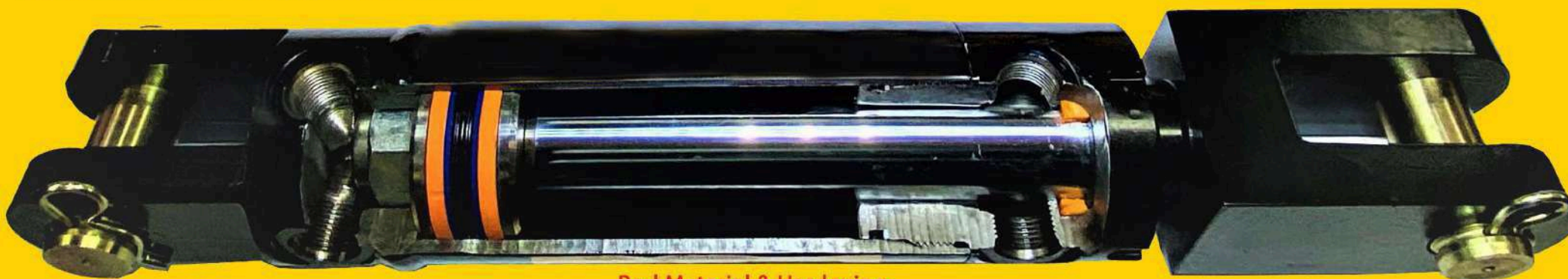
* All threads machined to 2A/B specification

* All pin holes machined to D9 tolerance

* All machine surface finishes to 3.2um Ra.

Colour

* Choice of industrial gloss yellow or industrial gloss black



Rod Material & Hardening:

* EN8D/C45 round bar

* Toughened and induction hardened

* Chrome thickness: 20 to 30 Microns
hard chromed piston rod for superior corrosion resistance (rods chromed in house)

Gland Material:

* SG IRON SG500/7 Spheroidal Graphite cast iron

All our products are certified worldwide with the following ISO standard:

* ISO 9001-2008 standard

* ISO 14001 & OSHAS 18001

* ISO 3834-2 (Fusion Welding Process)

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