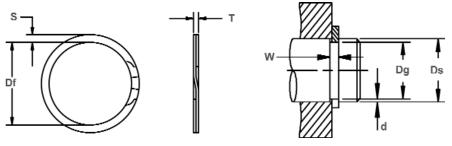


## **External, Heavy Duty DIN**

For applications where European DIN standards need to be met, these rings are designed to fit into the grooves established by DIN specifications.

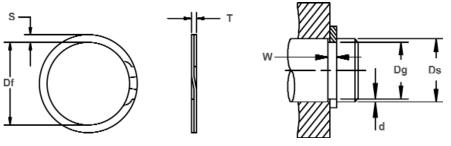


Free Diameter & Ring Measurements

Shaft Diameter & Groove Dimensions

No.   No.   DIAMETER   DIAMETER   WIGHT   DEPTH   FREE   THICKNESS   SECTION   Safety factor of large factor	RING	SHAFT		G	ROOVE SIZ	'E				THRUST	LOAD (N)				
Common			DIAN				DEPTH	FREE				SECTION			
Den-13   13   12,4														Safety	Safety
DGR-13															
DRR-14	202.40			Tol.		Tol.			Tol.		Tol.		Tol.	3	2
DGR-15	DCR-13				1,10					0,99				134/4	1901
DCR-16	DCK-14									0,99				14510	2047
DGR-17	DCR-10	10	14,3		1,10			14,15		0,99					2009
DGR-19   19   18   17   0   130   0.5   16.83   0.5   17.83   +0.00   1.14   1.91   1.91   1.96   1.90   1.90   1.90   1.30   0.5   17.83   +0.00   1.14   1.91	DCD-10	17		-0,11						0,99		1,00			3119
DGR-20   19   9   18.0	DCR-18	18		ł						1 14	1	1,03			4386
DGR-20	DCR-19			ł	1.30				±0.00		1			19705	4630
DGR-21   21   20.0	DCR-20	20			1.30					1 14	1	1 91		20742	4874
DGR-22   22   21.0	DCR-21	21	20.0	+0.00	1.30		0.5	19.79	0,00		1	1.91		21779	5117
DGR-24   24   22   9   1   30   0.6   22.66   1.60   0.7   25.34   1.14   ±0.05   2.18   ±0.10   28962   6701   6702   6701   6702   6702   6701   6702   6702   6702   6701   6702	DCR-22		21.0	4 '							1	1.91			
DGR-24   24   22.9   1.30   0.6   22.66   1.14   1.14   2.18   2.18   2.29   2.90   2.00   1.30   0.6   22.65   2.365   1.14   1.14   2.18	DCR-23	23	22,0	1			0,5				1	1.91		23853	
DGR-26   26   24.9   +0.00   0.6   23.65   1.14   +0.05   0.6   24.64   1.14   +0.05   0.6   23.65   0.6   0.6   0.6   0.6   24.64   1.14   +0.05   0.6   0.6   24.64   1.14   +0.05   0.6   23.65   0.6	DCR-24	24	22,9		1,30			22,66		1,14	1	2,18		24891	6433
DGR-27	DCR-25	25	23,9	]	1,30		0,6	23,65		1,14	]	2,18		25928	6701
DGR-28   28   26.6   1.60   0.7   26.34   1.44   2.39   36681   9552   37991   39830   39801   10235   302   303   303   31.60   +0.14   0.9   30.00   +0.00   1.44   3.25   41921   13256   41921   13256   303   31.3   31.3   31.3   31.3   31.8   35.2   32.3   35.3   33.0   35.6   33.0   32.6   33.3   31.8   35.2   32.6   33.3   31.8   35.2   32.6	DCR-26	26	24,9	+0,00	1,30		0,6	24,64			]			26965	6969
DCR-39   29   27.6	DCR-27			-0,21							±0,05		±0,10		
DCR-30 30 28.6 1.60 0.7 28.32 1.44 2.39 39301 10235   DCR-32 32 30.3 1.60 +0.14 0.9 30.99 -0.00 1.44 3.25 43231 13670   DCR-34 34 32.3 1.60 -0.00 0.9 31.98 1.44 3.25 44541 14085   DCR-36 36 34.0 1.85 1.0 32.66 1.69 4.01 55349 17545   DCR-37 2.9 1.85 1.0 33.65 1.69 4.01 55349 17545   DCR-38 38 36.0 +0.00 1.85 1.0 33.65 1.69 4.01 64851 1708   DCR-42 42 39.5 1.85 1.3 39.09 1.69 4.01 61498 2.4368   DCR-46 46 43.5 1.85 1.3 44.04 1.69 4.01 64673 25586   DCR-36	DCR-28	28	26,6	]	1,60		0,7	26,34				2,39		36681	9552
DCR-32   32   30,3   31,3   1,60   1,60   1,60   1,60   1,60   1,60   1,60   1,60   1,60   1,60   1,85   1,3   42,06   +0,00   1,69   4,01   64473   25886   27414   27628   27628	DCR-29	29	27,6									2,39		37991	
DCR-33	DCR-30									1,44					
DCR-34 34 32,3 1,60 -0,00 0,9 31,98 1,44 3,25 44541 14085   DCR-35 35 33,0 1,60 1,0 32,66 1,44 3,25 3,25 45851 17058   DCR-38 38 36,0 +0,00 1,85 1.0 33,64 1,69 4,01 58424 18520   DCR-40 40 37,5 -0,25 1,85 1,3 37,11 1,69 4,01 61498 24368   DCR-45 45 42,5 1,85 1,85 1,3 39,09 1,69 4,01 69188 27414 64573 25586   DCR-47 47 44,5 1,85 1,3 43,05 -0,51 1,69 4,01 69188 27414 770723 28023   DCR-48 48 45,5 1,85 1,3 43,03 1,69 4,01 773798 29242   DCR-50 50 47,0 2,15 1,5 <	DCR-32	32	30,3					30,00		1,44		3,25		41921	13256
DCR-35 35 33,0 1,60 1,0 32,65 1,44 3,25 45851 17058   DCR-36 36 34,0 +0,00 1,85 1,0 35,64 1,69 4,01 55349 17545   DCR-40 40 37,5 -0,25 1,85 1,3 37,11 1,69 4,01 61498 24368   DCR-42 42 39,5 1,85 1,3 37,11 1,69 4,01 61498 24368   DCR-45 45 42,5 1,85 1,3 39,09 1,69 4,01 61498 24368   DCR-46 46 43,5 1,85 1,3 43,05 -0,51 1,69 4,01 61498 24368   DCR-47 47 44,5 1,85 1,3 43,05 -0,51 1,69 4,01 70723 28023   DCR-30 50 47,0 2,15 1,5 46,53 1,93 5,08 4,01 70723 28023	DCR-33	33	31,3	1	1,60		0,9	30,99	-0,38	1,44		3,25		43231	136/0
DCR-36 36 34,0 DCR-38 38 36,0 DCR-40 40,0 I,85 1.0 35,64 1,69 I,69 I,69 I,69 I,69 I,69 I,69 I,69 I	DCR-34			l		-0,00				1,44				44541	14085
DCR-38   38   36,0   +0,00   1,85   1,0   35,64   1,69   4,01   6401   64573   25586   1,85   1,85   1,3   37,11   1,69   4,01   64573   25586   1,85   1,85   1,3   34,05   -0,51   1,69   4,01   70723   28023   1,99   1,	DCK-35	35	33,0	l	1,60			32,66		1,44				45851	17058
DCR-40 40 37,5 b CR-42 42 39,5 b CR-45 1,85 b 1,3 so,99 b 1,69 b 1,6	DCD-30		36,0		1,00		1.0			1,09					17545
DCR-42 42 39,5 DCR-45 1,85 description 1,3 description 1,3 description 1,69 description 4,01 description 64573 description 25586 description   DCR-45 45 description 45 description 42,5 description 1,85 description 1,3 description 1,69 description 4,01 description 664573 description 25586 description   DCR-47 47 description 44,01 description 4,01 description 70723 description 28023 description 77223 description 28023 description 77223 description 28023 description 77226 description 28033 description 77226 description 28033 description 77226 description 28033 description 4,01 description 77226 description 28033 description 77226 description 28033 description 77226 description 28033 description 77226 description 28033 description 4,01 description 4,01 description 4,01 description 77226 description 28633 description 4,01 des	DCR-40									1,09					
DCR-45 45 42,5 1,85 1,3 42,06 +0,00 1,69 4,01 69186 27414   DCR-46 46 43,5 1,85 1,3 42,06 +0,00 1,69 4,01 70723 28023   DCR-48 48 45,5 1,85 1,3 45,03 1,69 4,01 73798 29242   DCR-50 50 47,0 2,15 1,5 46,53 1,93 5,08 87790 36552   DCR-54 54 51,0 2,15 1,5 50,50 1,93 5,08 87790 36552   DCR-55 55 52,0 2,15 1,5 50,50 1,93 5,08 94813 39476   DCR-56 56 53,0 2,15 1,5 51,49 1,93 5,08 96569 40207   DCR-66 60 57,0 2,15 1,5 56,42 1,93 5,08 5,08 101836 42400   DCR-62 62	DCR-42	42	39.5	-0,23	1.85		1.3	39.09		1 69	1	4,01		64573	25586
DCR-46 46 43,5 DCR-47 47 44,5 DCR-48 48 45,5 DCR-47 1,85 DCR-50	DCR-45			1	1.85		1.3		+0.00	1 69	1	4 01			27414
DCR-47 47 44,5 DCR-48 48 45,5 1,85 1,3 44,04 1,69 4,01 72261 28633   DCR-48 48 45,5 1,85 1,85 1,3 45,03 1,69 4,01 73798 29242   DCR-50 50 47,0 2,15 1,5 46,53 1,93 5,08 87790 36552   DCR-54 54 51,0 2,15 1,5 46,53 1,93 5,08 91302 38014   DCR-55 55 52,0 2,15 1,5 50,50 1,93 5,08 94813 39476   DCR-56 56 53,0 2,15 1,5 51,49 1,93 5,08 94813 39476   DCR-56 56 53,0 2,15 1,5 54,43 -0,00 1,93 5,08 98255 40207   DCR-60 60 57,0 2,15 1,5 54,43 -0,63 1,93 5,08 101836 42	DCR-46		43.5	1	1.85		1.3	43.05		1.69	1			70723	28023
DCR-48 48 45,5 DCR-50 50 47,0 DCR-50 50 47,0 DCR-50 50 47,0 DCR-50 50 47,0 DCR-52 52 49,0 DCR-54 54 51,0 DCR-54 54 51,0 DCR-54 54 51,0 DCR-54 54 51,0 DCR-56 55 52,0 DCR-56 55 52,0 DCR-56 56 53,0 DCR-56 55,0 DCR-56 56 53,0 DCR-56 56 53,0 DCR-56 56,0 B 94813 39476 94813 39476 94813 39476 94813 39476 94813 39476 94813 39476 94813 39476 94813 39476 94813 39476 94813 39476 94813 39476 94813 39476 94813 39476 94813 39476 94813 39476 94813 39476 94813 39476 94813 39476 94813 39476 94813 94813 94825 94825 94825 94825 94	DCR-47			1					0,01		1				28633
DCR-50 50 47,0 DCR-52 52 49,0 DCR-54 54 51,0 DCR-54 54 51,0 DCR-55 55 55,08 DCR-56 56 53,0 DCR-56 56,0 S 5,08 DCR-56 96569 40207 MO208   DCR-58 58 55,0 D 2,15 1,5 54,43 DCR-56 -0,63 1,93 DCR-56 5,08 DCR-56 96569 DCR-57 40208 DCR-57 96569 DCR-57 40208 DCR-57 96569 DCR-57 40208 DCR-57 1,5 54,43 DCR-57 1,93 DCR-58 5,08 DCR-58 101836 DCR-58 42400 DCR-58 1,93 DCR-58 5,08 DCR-58 101836 DCR-58 42400 DCR-58 1,93 DCR-58 5,08 DCR-58 101836 DCR-58 42400 DCR-58 1,93 DCR-58 1,93 DCR-58 5,08 DCR-58 101836 DCR-58 42400 DCR-58 1,93 DCR	DCR-48			1							1				29242
DCR-52 52 49,0 2,15 1,5 48,51 1,93 1,93 5,08 91302 38014   DCR-54 54 51,0 2,15 1,5 50,50 1,93 5,08 5,08 94813 39476   DCR-55 55 52,0 2,15 1,5 51,49 +0,00 1,93 5,08 5,08 96569 40207   DCR-58 58 55,0 2,15 1,5 52,48 +0,00 1,93 5,08 5,08 96569 40207   DCR-60 60 57,0 2,15 1,5 56,42 1,93 5,08 5,08 98325 40938   DCR-62 62 59,0 2,15 1,5 56,42 1,93 5,08 5,08 101836 42400 105348 43863 105348 43863 105348 43863 105348 43863 105348 43863 105348 43863 105348 43863 105344 105344 105344 105344	DCR-50	50	47,0	1			1,5			1,93				87790	
DCR-55 55 52,0 DCR-56 56 53,0 DCR-56 56,08 DCR-56 5,08 DCR-56 65 62,0 DCR-56 65 62,0 DCR-56 1,5 DCR-56 56,39 DCR-56 1,5 DCR-56 65 62,0 DCR-56 1,5 DCR-56 65 62,0 DCR-56 1,5 DCR-57 67 64,0 DCR-57 1,5 DCR-57 67 64,0 DCR-57 1,5 DCR-57 67,0 DCR-57 1,5 DCR-57 67,0 DCR-57 1,5 DCR-57 66,34 DCR-58 1,5 DCR-58	DCR-52	52	49,0	1	2,15		1,5	48,51		1,93	1	5,08		91302	38014
DCR-56 56 53,0 DCR-58 58 55,0 DCR-58 58 55,0 DCR-58 58 55,0 DCR-58 58,08 DCR-60 50,0 Scale of the control of the	DCR-54	54	51,0		2,15		1,5	50,50		1,93	]	5,08		94813	39476
DCR-58 58 55,0   DCR-60 60 57,0   DCR-62 62 59,0   DCR-63 63 60,0   DCR-65 65 62,0   DCR-67 67 64,0   DCR-68 68 65,0   DCR-70 70 67,0   DCR-75 75 72,0   DCR-77 77 74,0 2,65   DCR-77 77 74,0 2,65 1,5 73,33 +0,00 2,41   DCR-78 78 75,0 2,65 1,5 73,33 -0,76 2,41   DCR-78 78 75,0 2,65 1,5 73,33 -0,76 2,41 5,08 ±0,12 108860 45325 105348 43863 5,08 ±0,12 108860 45325 110615 46056 5,08 133725 47518 5,08 133725 47518 5,08 139901 48980 48980 5,08 5,08 14989 49711<	DCR-55		52,0	]	2,15		1,5			1,93	]	5,08			
DCR-60 60 57,0 DCR-62 62 59,0 DCR-63 63 60,0 DCR-65 65 62,0 DCR-65 65 62,0 DCR-65 65 62,0 DCR-65 66 68 65,0 B DCR-65 1,5 58,42 DCR-65 1,5 59,39 DCR-65 1,5 50,8 DCR-65 1,93 DCR-65 ±0,12 DCR-65 108860 45325 DCR-65 108860 45325 DCR-65 1,5 61,39 DCR-61 2,41 DCR-61 ±0,08 DCR-65 5,08 DCR-65 ±0,08 DCR-65 5,08 DCR-65 135725 DCR-75 DCR-75 1,5 64,34 DCR-75 DCR-75 2,41 DCR-75 DCR-75 2,41 DCR-75 DCR-75 DCR-75 DCR-75 75 72,0 DCR-75 DCR-77 DCR-77 DCR-77 DCR-77 DCR-77 DCR-77 DCR-78	DCR-56		53,0				1,5	1,5 52,48				5,08			
DCR-62 62 59,0 DCR-63 63 60,0 DCR-65 65 62,0 DCR-65 1,5 58,42 DCR-65 1,93 DCR-65 ±0,08 DCR-65 5,08 DCR-65 ±0,12 DCR-65 108860 DCR-65 DCR-65 45325 DCR-65 DCR-65 5,08 DCR-65 DCR-65 ±0,00 DCR-65 DCR-65 DCR-65 ±0,00 DCR-65 DCR-65 DCR-65 ±0,00 DCR-65 DCR-65 DCR-65 DCR-65 DCR-75 ±0,00 DCR-65 DCR-65 DCR-75 DCR-75 DCR-75 DCR-75 DCR-75 DCR-77 DCR-77 DCR-77 DCR-77 DCR-77 DCR-77 DCR-78 DCR-75 DCR-7	DCR-58				2,15				-0,63					101836	42400
DCR-63 63 60,0 40,00 2,15 1,5 59,39 1,93 2,41 ±0,08 5,08 110615 46056   DCR-67 67 64,0 -0,30 2,65 1,5 61,39 2,41 ±0,08 5,08 135725 47518   DCR-68 68 65,0 66,0 1,5 64,34 2,41 5,08 141989 49711   DCR-70 70 67,0 2,65 1,5 66,34 2,41 2,41 5,08 146165 51173   DCR-72 72 69,0 2,65 1,5 68,33 +0,00 2,41 5,08 150341 52635   DCR-75 75 72,0 2,65 1,5 71,33 +0,00 2,41 5,08 150341 52635   DCR-77 77 74,0 2,65 1,5 74,33 -0,76 2,41 5,08 160782 56290   DCR-80 80 76,5 2,65 1,8 75,81	DCR-60			1	2,15		1,5							105348	43863
DCR-65 65 62,0 +0,00 2,65 1,5 61,39 2,41 ±0,08 5,08 135725 47518   DCR-67 67 64,0 -0,30 2,65 1,5 63,37 2,41 ±0,08 5,08 139901 48980   DCR-70 70 67,0 2,65 1,5 64,34 2,41 5,08 141989 49711   DCR-72 72 69,0 2,65 1,5 66,34 2,41 5,08 146165 51173   DCR-75 75 72,0 2,65 1,5 68,33 2,41 5,08 150341 52635   DCR-77 77 74,0 2,65 1,5 73,33 -0,76 2,41 5,08 160782 56290   DCR-78 78 75,0 2,65 1,5 74,33 2,41 5,08 162870 57021   DCR-80 80 76,5 2,65 1,8 75,81 2,41 5,08 162870 57021	DCR-62												±0,12		
DCR-67 67 64,0 -0,30 2,65 1,5 63,37 2,41 5,08 139901 48980   DCR-68 68 65,0 2,65 1,5 64,34 2,41 5,08 141989 49711   DCR-70 70 67,0 2,65 1,5 66,34 2,41 5,08 146165 51173   DCR-72 72 69,0 2,65 1,5 68,33 2,41 5,08 150341 52635   DCR-75 75 72,0 2,65 1,5 71,33 +0,00 2,41 5,08 150341 52635   DCR-77 77 74,0 2,65 1,5 73,33 -0,76 2,41 5,08 160782 56290   DCR-78 78 75,0 2,65 1,5 74,33 -0,76 2,41 5,08 162870 57021   DCR-80 80 76,5 2,65 1,8 75,81 2,41 6,05 ±0,13 167046 68231	DCK-63						1,5	59,39							
DCR-68 68 65,0 2,65 1,5 64,34 2,41 5,08 141989 49711   DCR-70 70 67,0 2,65 1,5 66,34 2,41 5,08 146165 51173   DCR-72 72 69,0 2,65 1,5 68,33 2,41 5,08 150341 52635   DCR-75 75 72,0 2,65 1,5 71,33 +0,00 2,41 5,08 156605 54828   DCR-77 77 74,0 2,65 1,5 73,33 -0,76 2,41 5,08 160782 56290   DCR-78 78 75,0 2,65 1,5 74,33 2,41 5,08 162870 57021   DCR-80 80 76,5 2,65 1,8 75,81 2,41 6,05 ±0,13 167046 68231	DCR-65						1,5				±0,08				
DCR-70 70 67,0 DCR-72 2,65 DCR-72 1,5 66,34 Section of the control of the contro	DCB 60			-0,30	2,05										48980
DCR-72 72 69,0 DCR-75 2,65 PCR-75 1,5 PCR-75 68,33 PCR-75 2,41 PCR-75 5,08 PCR-75 150341 PCR-75 52635 PCR-75 5,08 PCR-75 156605 PCR-75 54828 PCR-75 5,08 PCR-75 156605 PCR-75 54828 PCR-75 5,08 PCR-75 160782 PCR-75 56290 PCR-75 5,08 PCR-75 160782 PCR-75 56290 PCR-75 5,08 PCR-75 162870 PCR-75 57021 PCR-75 162870 PCR-75 1		70		1	2,00										49/11 51172
DCR-75 75 72,0 2,65 1,5 71,33 +0,00 2,41 5,08 156605 54828   DCR-77 77 74,0 2,65 1,5 73,33 -0,76 2,41 5,08 160782 56290   DCR-78 78 75,0 2,65 1,5 74,33 2,41 5,08 162870 57021   DCR-80 80 76,5 2,65 1,8 75,81 2,41 6,05 ±0,13 167046 68231		70		1	2,00		1,5					5,08			511/3
DCR-77 77 74,0 2,65 1,5 73,33 -0,76 2,41 5,08 160782 56290   DCR-78 78 75,0 2,65 1,5 74,33 2,41 5,08 162870 57021   DCR-80 80 76,5 2,65 1,8 75,81 2,41 6,05 ±0,13 167046 68231	DCR-75	75	72.0	1	2,05		1,5		+0.00	2,41		5,00		156605	54828
DCR-78 78 75,0 2,65 1,5 74,33 2,41 5,08 162870 57021   DCR-80 80 76,5 2,65 1,8 75,81 2,41 6,05 ±0,13 167046 68231	DCR-77	77	74.0	1	2.65										56290
<b>DCR-80</b> 80 76,5 2,65 1,8 75,81 2,41 6,05 ±0,13 167046 68231	DCR-78	78	75.0	1	2 65		1.5	74 33	0,70	2 41	1	5.08			57021
DCR-82   82   78.5   2.65   1.8   77.81   2.41   6.05   171222   69936	DCR-80			i				75.81			1		±0.13		
	DCR-82			1	2.65						1		_ 5,.5	171222	69936





Free Diameter & Ring Measurements

Shaft Diameter & Groove Dimensions

RING	SHAFT		GI	ROOVE SIZE					THRUST	LOAD (N)				
NO.	DIAMETER	DIAMETER				DEPTH	FREE		THICK	NESS	SECTION		RING	GROOVE
							DIAN	METER					Safety	Safety
													factor of	factor of
	(mm)	Dg	Tol.	W	Tol.	d	Df	Tol.	T	Tol.	S	tol.	3	2
DCR-85	85	81,5		3,15		1,8	80,80	+0,00 '-0,76	2,91		6,35		214309	72495
DCR-88	88	84,5	+0,00 - 0,35	3,15		1,8	83,80		2,91	±0,08	6,35		221873	75054
DCR-90	90	86,5		3,15		1,8	85,80	+0,00 -0,89	2,91		6,35		226915	76759
DCR-95	95	91,5		3,15		1,8	90,80		2,91		6,35		239522	81024
DCR-98	98	94,5		3,15		1,8	93,79		2,91		6,35		247086	83583
DCR-100	100	96,5 98,0		3,15		1,8	95,79 97,29		2,91		6,35		252128	85288 99422
DCR-102 DCR-105	102 105	101,0		4,15 4,15		2,0	100,28	+0,00 -1,30	3,89 3,89		6,73 6,73	±0.13	343778 353889	102346
DCR-103	108	104,0	+0,00	4,15		2,0	100,26		3,89		6,73	±0,13	364000	105270
DCR-100	110	106,0	-0.54	4,15		2,0	105,23		3,89		6,73		370741	107220
DCR-115	115	111,0	-0,54	4,15		2,0	110,19		3,89		6,73		387593	112093
DCR-120	120	116.0		4,15		2,0	115,16		3,89		6,73		404445	116967
DCR-125	125	121,0	$\vdash$	4,15		2,0	120,12		3,89		6,73		421297	121840
DCR-130	130	126,0		4,15		2,0	125,07		3,89		6,73		438149	126714
DCR-135	135	131,0		4,15	+0,18 -0,00	2.0	130,02		3,89		6.73		455001	131588
DCR-140	140	136,0		4,15		2,0	134,98		3,89	±0,10	6,73		471852	136461
DCR-145	145	141,0		4,15		2,0	139,93		3,89		6,73		488704	141335
DCR-150	150	145,0	+0,00 -0,63	4,15		2,5	143,91	+0,00 -1,52 +0,00 -1,78 +0,00 -2,30	3,89		7,92		505556	182761
DCR-155	155	150,0		4,15		2,5	148,89		3,89		7,92		522408	188853
DCR-160	160	155,0		4,15		2,5	153,85		3,89		7,92		539260	194945
DCR-165	165	160,0		4,15		2,5	158,80		3,89		7,92		556112	201037
DCR-170	170	165,0		4,15		2,5	163,75		3,89		7,92		572964	207129
DCR-175	175	170,0		4,15		2,5	168,73		3,89		7,92	] [	589815	213221
DCR-180	180	175,0		4,15		2,5	173,69		3,89		7,92		606667	219313
DCR-185	185	180,0		4,15		2,5	178,66		3,89		7,92	±0,15	623519	225405
DCR-190	190	185,0		4,15		2,5	183,59		3,89		7,92		640371	231497
DCR-195	195	190,0		4,15		2,5	188,54		3,89		7,92		657223	237589
DCR-200	200	195,0	+0,00	4,15		2,5	193,54		3,89		7,92		674075	243681
DCR-205	205	199,0		5,15		3,0	197,54		4,86		11,18		863214	299727
DCR-210	210	204,0		5,15		3,0	202,54		4,86		11,18		884268	307038
DCR-220	220	214,0		5,15		3,0	212,47		4,86		11,18		926376	321659
DCR-230 DCR-240	230 240	224,0 234,0		5,15 5,15		3,0	222,40 232,33		4,86 4,86		11,18 11,18		968484 1010592	336280 350900
DCR-250	250	244,0		5,15		3,0	242,24		4,86		11,18		1010592	365521
DCR-260	260	252,0		5,15		4,0	250,19		4,86		12,70	$\vdash$	1094808	506856
DCR-270	270	262,0		5,15		4.0	260,15		4,86		12,70		1136916	526351
DCR-270	280	272,0		5,15		4,0	270,08		4,86		12,70		1179024	545845
DCR-290	290	282,0	-0,81	5,15		4,0	279,98		4,86	±0,13	12,70	±0,19	1221132	565340
DCR-300	300	292,0	-0,01	5,15		4,0	289,92		4,86		12,70		1263241	584834
DCR-310	310	300,0		6,20		5,0	297,84		5,87		15,88		576625	755411
DCR-320	320	310,0		6,20		5,0	307,84		5,87		15,88		627484	779779
DCR-330	330	320,0		6,20		5,0	317,75		5,87		15,88		1678342	804147
DCR-340	340	330,0		6,20		5,0	327,69		5,87		15,88	''	729201	828515
DCR-350	350	340,0		6,20	+0,22	5,0	337,64	+0,00	5,87		15,88		1780060	852883
DCR-360	360	350,0	+0,00	6,20	-0,00	5,0	347,57	-2,80	5,87		15,88		1830919	877251
DCR-370	370	360,0	-0,89	6,20		5,0	357,48		5,87		15,88		1881778	901619
DCR-380	380	370,0	]	6,20	1	5,0	367,41		5,87		15,88		1932637	925987
DCR-390	390	380,0		6,20		5,0	377,34		5,87		15,88		1983496	950355
DCR-400	400	390,0		6,20		5,0	387,25		5,87		15,88	I	2034354	974723