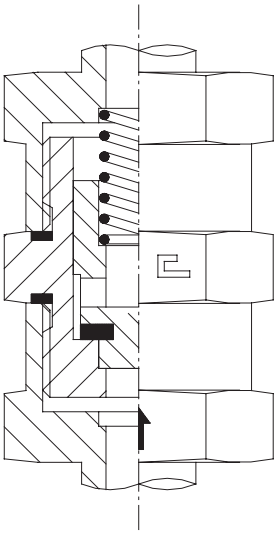
CAST NON RETURN VALVE



THEORY OF OPERATION

Cast S.p.A. non return valve is used in all those circuits where the fluid must flow in one way only, avoiding the flow in the opposite direction

TO OBTAIN PERFECT SEALING:

1. Make sure that all tubes are perfectly clean and that there are no impurities in the system where the fluid will flow.
2. Remove protective caps only when ready to assemble, making sure that in the assembly phase no impurities enter the system.

TECHNICAL CHARACTERISTICS

1. Cast S.p.A. non return valve assures a perfect tightness of the circuit, provided that the indicated nominal working pressures are kept as referred to in this catalogue.
2. The particular profile of its inner elements assures the correct flow with a minimum pressure drop.
3. The valve is a compact, particularly sturdy element; the seal is obtained by a plain seat metal to metal plug with an elastomeric seal gasket assuring tightness at low working pressures.
4. A basic body allows to different types of non return valves to be interchanged by applying, from time to time, the different engaged stud ends as chosen by the customer, allowing for easy logistic of the stock.
5. The valve may be used for convoying mineral oils, fuels, compressed air or gases. When ordering please specify if the fluid needs specific type of gaskets.
6. The nominal working temperature is between -40C° and +120C° Celsius degrees for carbon steel, and between -60C° and +200C° Celsius degrees for stainless steel. The limit may change according to the type of gasket used.

TECHNICAL DATA

Maximum advised flow speed is 5mt/sec. The standard opening pressure is 1 bar; if specified when ordering, we can supply non return valves with an opening pressure up to 3 bars with 0.5 bar steps.

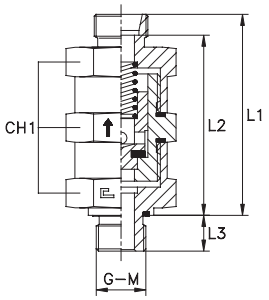
COMPONENT TESTING

All the valves are checked for leaks at low pressure and at the opening value; high pressure tests are carried out at the maximum nominal working pressures plus 33%.

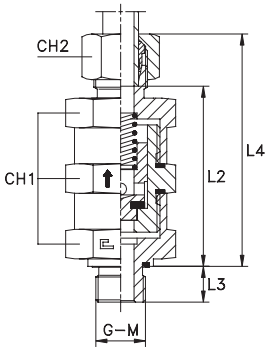
MALE STUD NON RETURN VALVE WITH ELASTOMER SEAL

Thread BSP Parallel - Thread Metric Parallel

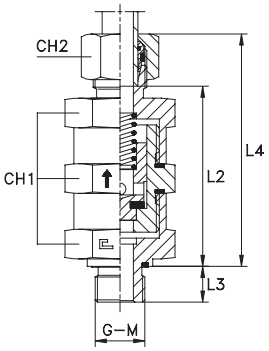
Type: **5002…1** Body
Type: **5003…1** Body



Type: **5002..** B3 Ring
Type: **5003..** B3 Ring



Type: **5002…4** B4 Ring
Type: **5003…4** B4 Ring



Series DIN	50.... [bar]	51.... [bar]	Ordering Body	Ordering Equipped B3	Ø Tube	G	L1	L2	L3	L4	CH1	CH2	Øpass.	Ordering Equipped B4
L	250	250	**500204.1**	**500204**	6	1/8	60	53	8	67,5	19	14	4	**500204.4**
			500205.1	**500205**	8	1/4	60	53	12	67,5	19	17	4	**500205.4**
			500206.1	**500206**	10	1/4	61	54	12	68,5	19	19	4	**500206.4**
			500207.1	**500207**	12	3/8	67,5	60,5	12	75	32	22	8	**500207.4**
			500208.1	**500208**	15	1/2	72	65	14	80	41	27	11	**500208.4**
	160	160	**500209.1**	**500209**	18	1/2	72	64,5	14	80,5	41	32	11	**500209.4**
			500210.1	**500210**	22	3/4	83	75,5	16	91,5	50	36	16	**500210.4**
	100	100	**500211.1**	**500211**	28	1	83	75,5	18	92	50	41	18	**500211.4**
			500212.1	**500212**	35	1 1/4	103	92,5	20	114	70	50	25	**500212.4**
			500213.1	**500213**	42	1 1/2	103	92	22	114,5	70	60	29	**500213.4**
S	400	400	**500214.1**	**500214**	6	1/4	62	55	12	69,5	19	17	4	**500214.4**
			500215.1	**500215**	8	1/4	62	55	12	69,5	19	19	4	**500215.4**
			500216.1	**500216**	10	3/8	68,5	61	12	77	32	22	7	**500216.4**
			500217.1	**500217**	12	3/8	68,5	61	12	77	32	24	8	**500217.4**
			500218.1	**500218**	14	1/2	74	66	14	83,5	41	27	10	**500218.4**
			500219.1	**500219**	16	1/2	74	65,5	14	83,5	41	30	11	**500219.4**
			500220.1	**500220**	20	3/4	85	74,5	16	96	50	36	16	**500220.4**
	250	250	**500221.1**	**500221**	25	1	87	75	18	99	50	46	18	**500221.4**
			500222.1	**500222**	30	1 1/4	107	93,5	20	120	70	50	25	**500222.4**
			500223.1	**500223**	38	1 1/2	109	93	22	123,5	70	60	29	**500223.4**

Note: If you wish to order AISI 316 stainless steel fittings, please change the first two digits from **50....** to **51....** .
If you wish to order AISI 316 stainless steel fittings with AISI 304 stainless steel nuts, please change the first two digits from **50....** to **54....** .

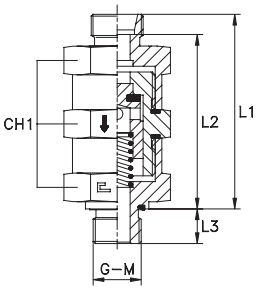
Series DIN	50.... [bar]	51.... [bar]	Ordering Body	Ordering Equipped B3	Ø Tube	M	L1	L2	L3	L4	CH1	CH2	Øpass.	Ordering Equipped B4
L	250	250	**500304.1**	**500304**	6	10x1	60	53	8	67,5	19	14	4	**500304.4**
			500305.1	**500305**	8	12x1,5	60	53	12	67,5	19	17	4	**500305.4**
			500306.1	**500306**	10	14x1,5	61	54	12	68,5	19	19	4	**500306.4**
			500307.1	**500307**	12	16x1,5	67	60	12	74,5	32	22	8	**500307.4**
			500308.1	**500308**	15	18x1,5	72	65	12	80	41	27	11	**500308.4**
	160	160	**500309.1**	**500309**	18	22x1,5	72	64,5	14	80,5	41	32	11	**500309.4**
			500310.1	**500310**	22	26x1,5	83	75,5	16	91,5	50	36	18	**500310.4**
	100	100	**500311.1**	**500311**	28	33x2	83	75,5	18	92	50	41	18	**500311.4**
			500312.1	**500312**	35	42x2	103	92,5	20	114	70	50	25	**500312.4**
			500313.1	**500313**	42	48x2	103	92	22	114,5	70	60	29	**500313.4**
S	400	400	**500314.1**	**500314**	6	12x1,5	62	55	12	69,5	19	17	4	**500314.4**
			500315.1	**500315**	8	14x1,5	62	55	12	69,5	19	19	4	**500315.4**
			500316.1	**500316**	10	16x1,5	68,5	61	12	77	32	22	7	**500316.4**
			500317.1	**500317**	12	18x1,5	68,5	61	12	77	32	24	8	**500317.4**
			500318.1	**500318**	14	20x1,5	74	66	14	83,5	41	27	10	**500318.4**
			500319.1	**500319**	16	22x1,5	74	65,5	14	83,5	41	30	11	**500319.4**
			500320.1	**500320**	20	27x2	85	74,5	16	96	50	36	16	**500320.4**
	250	250	**500321.1**	**500321**	25	33x2	87	75	18	99	50	46	18	**500321.4**
			500322.1	**500322**	30	42x2	107	93,5	20	120	70	50	25	**500322.4**
			500323.1	**500323**	38	48x2	109	93	22	123,5	70	60	29	**500323.4**

Note: If you wish to order AISI 316 stainless steel fittings, please change the first two digits from **50....** to **51....** .
If you wish to order AISI 316 stainless steel fittings with AISI 304 stainless steel nuts, please change the first two digits from **50....** to **54....** .

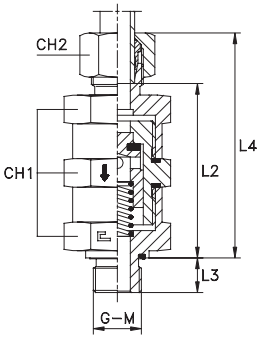
MALE STUD NON RETURN VALVE WITH ELASTOMER SEAL

Thread BSP Parallel - Thread Metric Parallel

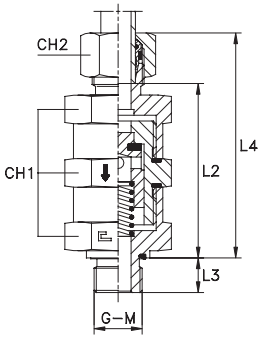
Type: **5004...1** Body
Type: **5005...1** Body



Type: **5004..** B3 Ring
Type: **5005..** B3 Ring



Type: **5004...4** B4 Ring
Type: **5005...4** B4 Ring



Series DIN	50.... [bar]	51.... [bar]	Ordering Body	Ordering Equipped B3	Ø Tube	G	L1	L2	L3	L4	CH1	CH2	Øpass.	Ordering Equipped B4
L	250	250	**500404.1**	**500404**	6	1/8	60	53	8	67,5	19	14	4	**500404.4**
			500405.1	**500405**	8	1/4	60	53	12	67,5	19	17	4	**500405.4**
			500406.1	**500406**	10	1/4	61	54	12	68,5	19	19	4	**500406.4**
			500407.1	**500407**	12	3/8	67,5	60,5	12	75	32	22	8	**500407.4**
			500408.1	**500408**	15	1/2	72	65	14	80	41	27	11	**500408.4**
	160	160	**500409.1**	**500409**	18	1/2	72	64,5	14	80,5	41	32	11	**500409.4**
			500410.1	**500410**	22	3/4	83	75,5	16	91,5	50	36	16	**500410.4**
	100	100	**500411.1**	**500411**	28	1	83	75,5	18	92	50	41	18	**500411.4**
			500412.1	**500412**	35	1 1/4	103	92,5	20	114	70	50	25	**500412.4**
			500413.1	**500413**	42	1 1/2	103	92	22	114,5	70	60	29	**500413.4**
S	400	400	**500414.1**	**500414**	6	1/4	62	55	12	69,5	19	17	4	**500414.4**
			500415.1	**500415**	8	1/4	62	55	12	69,5	19	19	4	**500415.4**
			500416.1	**500416**	10	3/8	68,5	61	12	77	32	22	7	**500416.4**
			500417.1	**500417**	12	3/8	68,5	61	12	77	32	24	8	**500417.4**
			500418.1	**500418**	14	1/2	74	66	14	83,5	41	27	10	**500418.4**
			500419.1	**500419**	16	1/2	74	65,5	14	83,5	41	30	11	**500419.4**
			500420.1	**500420**	20	3/4	85	74,5	16	96	50	36	16	**500420.4**
	250	250	**500421.1**	**500421**	25	1	87	75	18	99	50	46	18	**500421.4**
			500422.1	**500422**	30	1 1/4	107	93,5	20	120	70	50	25	**500422.4**
			500423.1	**500423**	38	1 1/2	109	93	22	123,5	70	60	29	**500423.4**

Note: If you wish to order AISI 316 stainless steel fittings, please change the first two digits from **50....** to **51....** .
If you wish to order AISI 316 stainless steel fittings with AISI 304 stainless steel nuts, please change the first two digits from **50....** to **54....** .

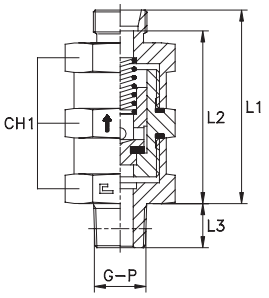
Series DIN	50.... [bar]	51.... [bar]	Ordering Body	Ordering Equipped B3	Ø Tube	M	L1	L2	L3	L4	CH1	CH2	Øpass.	Ordering Equipped B4
L	250	250	**500504.1**	**500504**	6	10x1	60	53	8	67,5	19	14	4	**500504.4**
			500505.1	**500505**	8	12x1,5	60	53	12	67,5	19	17	4	**500505.4**
			500506.1	**500506**	10	14x1,5	61	54	12	68,5	19	19	4	**500506.4**
			500507.1	**500507**	12	16x1,5	67	60,5	12	74,5	32	22	8	**500507.4**
			500508.1	**500508**	15	18x1,5	72	65	12	80	41	27	11	**500508.4**
	160	160	**500509.1**	**500509**	18	22x1,5	72	64,5	14	80,5	41	32	11	**500509.4**
			500510.1	**500510**	22	26x1,5	83	75,5	16	91,5	50	36	18	**500510.4**
	100	100	**500511.1**	**500511**	28	33x2	83	75,5	18	92	50	41	18	**500511.4**
			500512.1	**500512**	35	42x2	103	92,5	20	114	70	50	25	**500512.4**
			500513.1	**500513**	42	48x2	103	92	22	114,5	70	60	29	**500513.4**
S	400	400	**500514.1**	**500514**	6	12x1,5	62	55	12	69,5	19	17	4	**500514.4**
			500515.1	**500515**	8	14x1,5	62	55	12	69,5	19	19	4	**500515.4**
			500516.1	**500516**	10	16x1,5	68,5	61	12	77	32	22	7	**500516.4**
			500517.1	**500517**	12	18x1,5	68,5	61	12	77	32	24	8	**500517.4**
			500518.1	**500518**	14	20x1,5	74	66	14	83,5	41	27	10	**500518.4**
			500519.1	**500519**	16	22x1,5	74	65,5	14	83,5	41	30	11	**500519.4**
			500520.1	**500520**	20	27x2	85	74,5	16	96	50	36	16	**500520.4**
	250	250	**500521.1**	**500521**	25	33x2	87	75	18	99	50	46	18	**500521.4**
			500522.1	**500522**	30	42x2	107	93,5	20	120	70	50	25	**500522.4**
			500523.1	**500523**	38	48x2	109	93	22	123,5	70	60	29	**500523.4**

Note: If you wish to order AISI 316 stainless steel fittings, please change the first two digits from **50....** to **51....** .
If you wish to order AISI 316 stainless steel fittings with AISI 304 stainless steel nuts, please change the first two digits from **50....** to **54....** .

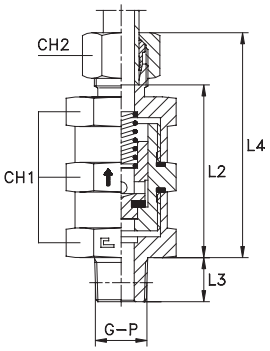
MALE STUD NON RETURN VALVE

Thread BSP Taper - Thread NPT

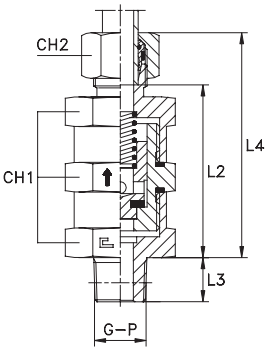
Type: **5006…1** Body
Type: **5007…1** Body



Type: **5006..** B3 Ring
Type: **5007..** B3 Ring



Type: **5006…4** B4 Ring
Type: **5007…4** B4 Ring



Series DIN	50…. [bar]	51…. [bar]	Ordering Body	Ordering Equipped B3	Ø Tube	G	L1	L2	L3	L4	CH1	CH2	Øpass.	Ordering Equipped B4
L	250	250	**500604.1**	**500604**	6	1/8	58	51	10	65,5	19	14	4	
			500605.1	**500605**	8	1/4	58	51	15	65,5	19	17	4	**500605.4**
			500606.1	**500606**	10	1/4	59	52	15	66,5	19	19	4	**500606.4**
			500607.1	**500607**	12	3/8	65	58	15	72,5	32	22	8	**500607.4**
			500608.1	**500608**	15	1/2	69	62	19	77	41	27	11	**500608.4**
	160	160	**500609.1**	**500609**	18	1/2	69	61,5	19	77,5	41	32	11	**500609.4**
			500610.1	**500610**	22	3/4	80	72,5	19	88,5	50	36	16	**500610.4**
	100	100	**500611.1**	**500611**	28	1	80	72,5	24	89	50	41	18	**500611.4**
			500612.1	**500612**	35	1 1/4	100	89,5	25	111	70	50	25	**500612.4**
			500613.1	**500613**	42	1 1/2	100	89	25	111,5	70	60	29	**500613.4**
S	400	400	**500614.1**	**500614**	6	1/4	60	53	15	67,5	19	17	4	**500614.4**
			500615.1	**500615**	8	1/4	60	53	15	67,5	19	19	4	**500615.4**
			500616.1	**500616**	10	3/8	66	58,5	15	74,5	32	22	7	**500616.4**
			500617.1	**500617**	12	3/8	66	58,5	15	74,5	32	24	8	**500617.4**
			500618.1	**500618**	14	1/2	71	63	19	80,5	41	27	10	**500618.4**
			500619.1	**500619**	16	1/2	71	62,5	19	80,5	41	30	11	**500619.4**
			500620.1	**500620**	20	3/4	82	71,5	19	93	50	36	16	**500620.4**
	250	250	**500621.1**	**500621**	25	1	84	72	24	96	50	46	18	**500621.4**
			500622.1	**500622**	30	1 1/4	104	90,5	25	117	70	50	25	**500622.4**
			500623.1	**500623**	38	1 1/2	106	90	25	120,5	70	60	29	**500623.4**

Note: If you wish to order AISI 316 stainless steel fittings, please change the first two digits from **50….** to **51….** .
If you wish to order AISI 316 stainless steel fittings with AISI 304 stainless steel nuts, please change the first two digits from **50….** to **54….** .
Items available on scheduled orders only

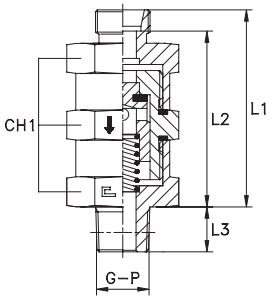
Series DIN	50…. [bar]	51…. [bar]	Ordering Body	Ordering Equipped B3	Ø Tube	P	L1	L2	L3	L4	CH1	CH2	Øpass.	Ordering Equipped B4
L	250	250	**500704.1**	**500704**	6	1/8	58	51	10	65,5	19	14	4	**500704.4**
			500705.1	**500705**	8	1/4	58	51	15	65,5	19	17	4	**500705.4**
			500706.1	**500706**	10	1/4	59	52	15	66,5	19	19	4	**500706.4**
			500707.1	**500707**	12	3/8	65	58	15	72,5	32	22	8	**500707.4**
			500708.1	**500708**	15	1/2	69	62	19	77	41	27	11	**500708.4**
	160	160	**500709.1**	**500709**	18	1/2	69	61,5	19	77,5	41	32	11	**500709.4**
			500710.1	**500710**	22	3/4	80	72,5	19	88,5	50	36	16	**500710.4**
	100	100	**500711.1**	**500711**	28	1	80	72,5	24	89	50	41	18	**500711.4**
			500712.1	**500712**	35	1 1/4	100	89,5	25	111	70	50	25	**500712.4**
			500713.1	**500713**	42	1 1/2	100	89	25	111,5	70	60	29	**500713.4**
S	400	400	**500714.1**	**500714**	6	1/4	60	53	15	67,5	19	17	4	**500714.4**
			500715.1	**500715**	8	1/4	60	53	15	67,5	19	19	4	**500715.4**
			500716.1	**500716**	10	3/8	66	58,5	15	74,5	32	22	7	**500716.4**
			500717.1	**500717**	12	3/8	66	58,5	15	74,5	32	24	8	**500717.4**
			500718.1	**500718**	14	1/2	71	63	19	80,5	41	27	10	**500718.4**
			500719.1	**500719**	16	1/2	71	62,5	19	80,5	41	30	11	**500719.4**
			500720.1	**500720**	20	3/4	82	71,5	19	93	50	36	16	**500720.4**
	250	250	**500721.1**	**500721**	25	1	84	72	24	96	50	46	18	**500721.4**
			500722.1	**500722**	30	1 1/4	104	90,5	25	117	70	50	25	**500722.4**
			500723.1	**500723**	38	1 1/2	106	90	25	120,5	70	60	29	**500723.4**

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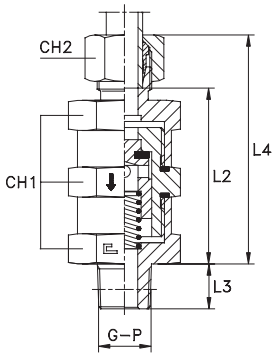
MALE STUD NON RETURN VALVE

Thread BSP Taper - Thread NPT

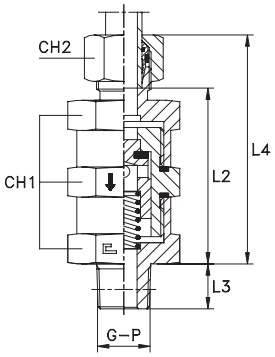
Type: **5008...1** Body
Type: **5009...1** Body



Type: **5008..** B3 Ring
Type: **5009..** B3 Ring



Type: **5008...4** B4 Ring
Type: **5009...4** B4 Ring



Series DIN	50.... [bar]	51.... [bar]	Ordering Body	Ordering Equipped B3	Ø Tube	G	L1	L2	L3	L4	CH1	CH2	Øpass.	Ordering Equipped B4
L	250	250	**500804.1**	**500804**	6	1/8	58	51	10	65,5	19	14	4	**500805,4**
			500805.1	**500805**	8	1/4	58	51	15	65,5	19	17	4	**500805.4**
			500806.1	**500806**	10	1/4	59	52	15	66,5	19	19	4	**500806.4**
			500807.1	**500807**	12	3/8	65	58	15	72,5	32	22	8	**500807.4**
			500808.1	**500808**	15	1/2	69	62	19	77	41	27	11	**500808.4**
	160	160	**500809.1**	**500809**	18	1/2	69	61,5	19	77,5	41	32	11	**500809.4**
			500810.1	**500810**	22	3/4	80	72,5	19	88,5	50	36	16	**500810.4**
	100	100	**500811.1**	**500811**	28	1	80	72,5	24	89	50	41	18	**500811.4**
			500812.1	**500812**	35	1 1/4	100	89,5	25	111	70	50	25	**500812.4**
			500813.1	**500813**	42	1 1/2	100	89	25	111,5	70	60	29	**500813.4**
S	400	400	**500814.1**	**500814**	6	1/4	60	53	15	67,5	19	17	4	**500814.4**
			500815.1	**500815**	8	1/4	60	53	15	67,5	19	19	4	**500815.4**
			500816.1	**500816**	10	3/8	66	58,5	15	74,5	32	22	7	**500816.4**
			500817.1	**500817**	12	3/8	66	58,5	15	74,5	32	24	8	**500817.4**
			500818.1	**500818**	14	1/2	71	63	19	80,5	41	27	10	**500818.4**
			500819.1	**500819**	16	1/2	71	62,5	19	80,5	41	30	11	**500819.4**
			500820.1	**500820**	20	3/4	82	71,5	19	93	50	36	16	**500820.4**
	250	250	**500821.1**	**500821**	25	1	84	72	24	96	50	46	18	**500821.4**
			500822.1	**500822**	30	1 1/4	104	90,5	25	117	70	50	25	**500822.4**
			500823.1	**500823**	38	1 1/2	106	90	25	120,5	70	60	29	**500823.4**

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Series DIN	50.... [bar]	51.... [bar]	Ordering Body	Ordering Equipped B3	Ø Tube	P	L1	L2	L3	L4	CH1	CH2	Øpass.	Ordering Equipped B4
L	250	250	**500904.1**	**500904**	6	1/8	58	51	10	65,5	19	14	4	**500904.4**
			500905.1	**500905**	8	1/4	58	51	15	65,5	19	17	4	**500905.4**
			500906.1	**500906**	10	1/4	59	52	15	66,5	19	19	4	**500906.4**
			500907.1	**500907**	12	3/8	65	58	15	72,5	32	22	8	**500907.4**
			500908.1	**500908**	15	1/2	69	62	19	77	41	27	11	**500908.4**
	160	160	**500909.1**	**500909**	18	1/2	69	61,5	19	77,5	41	32	11	**500909.4**
			500910.1	**500910**	22	3/4	80	72,5	19	88,5	50	36	16	**500910.4**
	100	100	**500911.1**	**500911**	28	1	80	72,5	24	89	50	41	18	**500911.4**
			500912.1	**500912**	35	1 1/4	100	89,5	25	111	70	50	25	**500912.4**
			500913.1	**500913**	42	1 1/2	100	89	25	111,5	70	60	29	**500913.4**
S	400	400	**500914.1**	**500914**	6	1/4	60	53	15	67,5	19	17	4	**500914.4**
			500915.1	**500915**	8	1/4	60	53	15	67,5	19	19	4	**500915.4**
			500916.1	**500916**	10	3/8	66	58,5	15	74,5	32	22	7	**500916.4**
			500917.1	**500917**	12	3/8	66	58,5	15	74,5	32	24	8	**500917.4**
			500918.1	**500918**	14	1/2	71	63	19	80,5	41	27	10	**500918.4**
			500919.1	**500919**	16	1/2	71	62,5	19	80,5	41	30	11	**500919.4**
			500920.1	**500920**	20	3/4	82	71,5	19	93	50	36	16	**500920.4**
	250	250	**500921.1**	**500921**	25	1	84	72	24	96	50	46	18	**500921.4**
			500922.1	**500922**	30	1 1/4	104	90,5	25	117	70	50	25	**500922.4**
			500923.1	**500923**	38	1 1/2	106	90	25	120,5	70	60	29	**500923.4**

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