BALL VALVE

SERIES High Performance Flanged end Ball Valve

APPLICATIONS

Pulp and Paper, Oil and Gas, Steam, Toxic, Fire-safe and Flammables.

OPTION

- Special painting
- Special tests on request
  - X-ray (RT)
  - Liquid penetrant (PT)
  - Positive Material Identification (PMI)

TECHNICAL DATA

Model / Size	Full bore 251, 253, 256 1/2" ~ 8" (150/300#) 1/2" ~ 4" (600#)
Pressure Rating	ASME Class 150, 300, 600
Temperature	-29°C ~ 230°C
Seat Leakage	Zero leakage to API 598
Certificate	**API 607** **ISO 15848-1** **API 641**

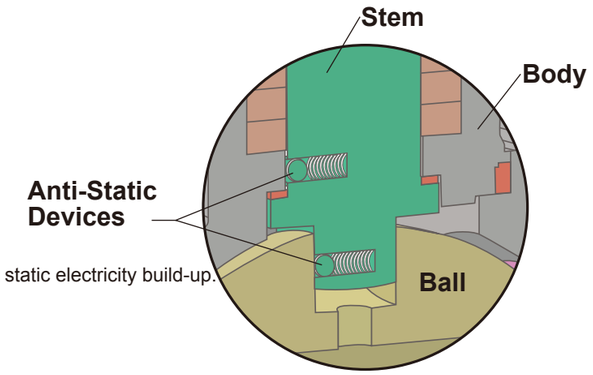
FEATURES

- Superior valve design at a competitive price.
- Fugitive emissions control for flammable and non-flammable applications.
- Valve fugitive emissions capability third-party certified to ISO 15848-1.
- Machined ISO actuator mounting pad.
- RPTFE seal relieves concern over product contamination.
- Fire test certified to API 607 6th edition and ISO 10497.
- Lower operating torque for ease of operation and reduced actuator cost.
- Positive position indication.
- Blowout-proof shaft.
- NACE MR0175 available on request.
- Locking device is available.
- Anti-Static Device.
- Manufactured under ISO 9001 certified quality system.
- Primary O-ring Seal.
- CE marking PED 2014/68/EU as standard. Available on request.
- Various seat materials are available.
  In addition to standard seat material, following variety is available.
  Each material option will meet a wide range of performance, suitable for many applications.
  - PTFE + 15% Glass Fiber
  - PTFE + 25% Carbon Fiber
  - Modified PTFE
  - Modified PTFE + 25% Carbon Fiber
  - PTFE + 50% SS
  - PEEK
  - UHMWPE

  * Please refer to the Pressure-Temperature rating.

MODEL **251 / 253 / 256**

Product Introduction

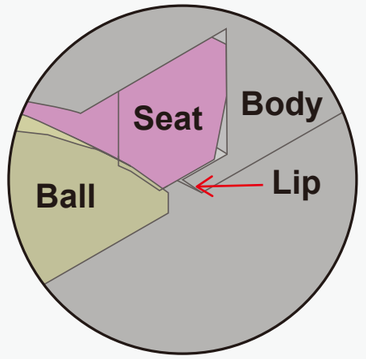


- **Anti-Static Plunger**
  Positive connection of ball and stem to valve body, preventing static electricity build-up.

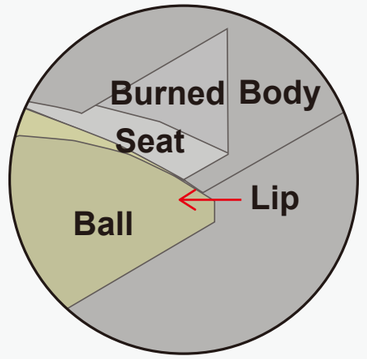
- **Blowout-Proof Stem**
  Internally fitted back-seated stem prevents blowouts under pressure and also functions as the backseat for stem sealing.

- **Locking Device***
  Locks valve in open and closed positions to prevent accidental valve operation.
- **Double D Stem Design**
  Ensures lever can only be fitted in line with flow direction for positive open/closed indication.
- **ISO 5211 Actuator Mount ISO 5211**
  Integral actuator mounting pad is standard for all modern pneumatic and electric actuators.

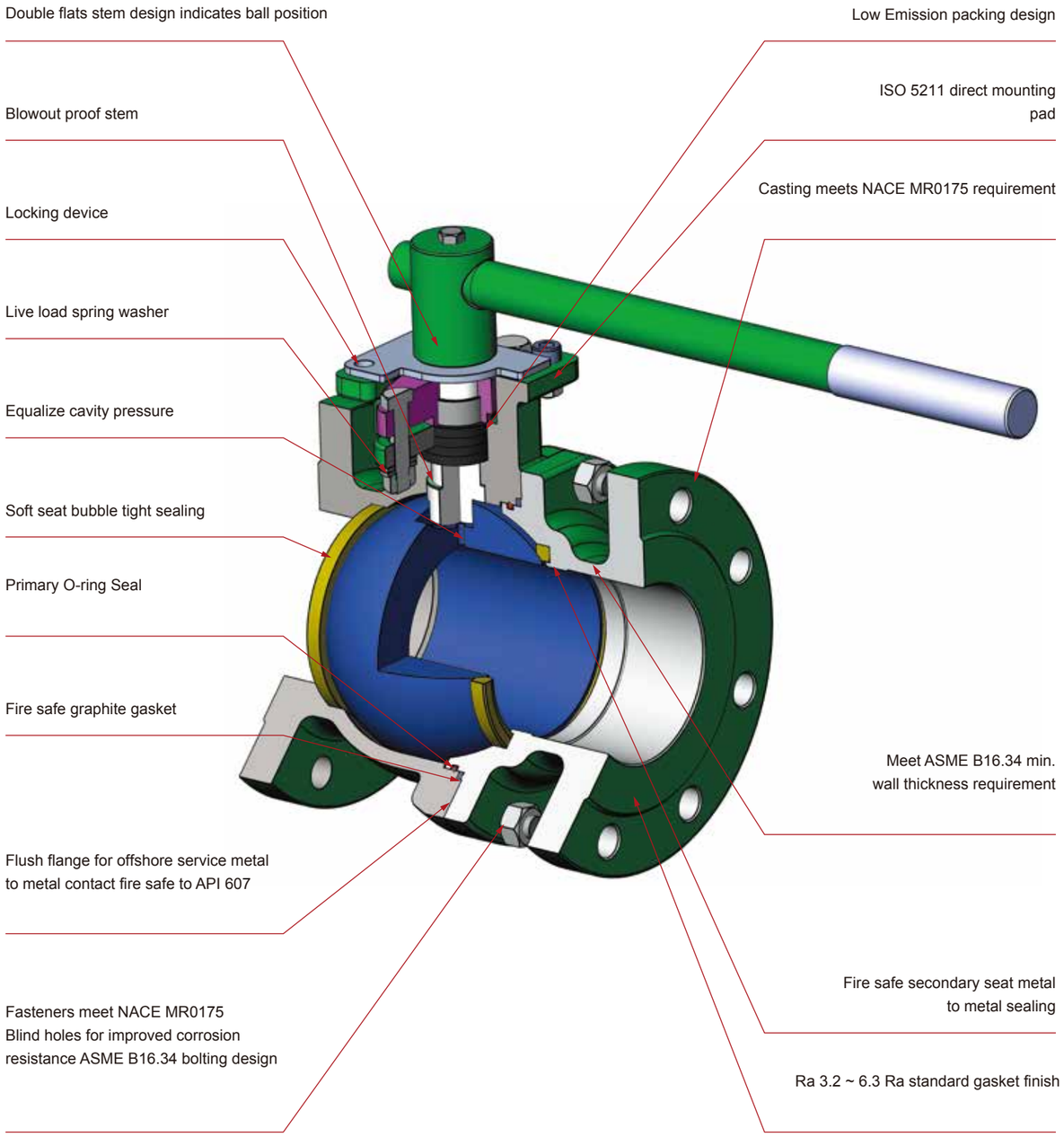
FIRE SAFE STATEMENT FOR SEAT



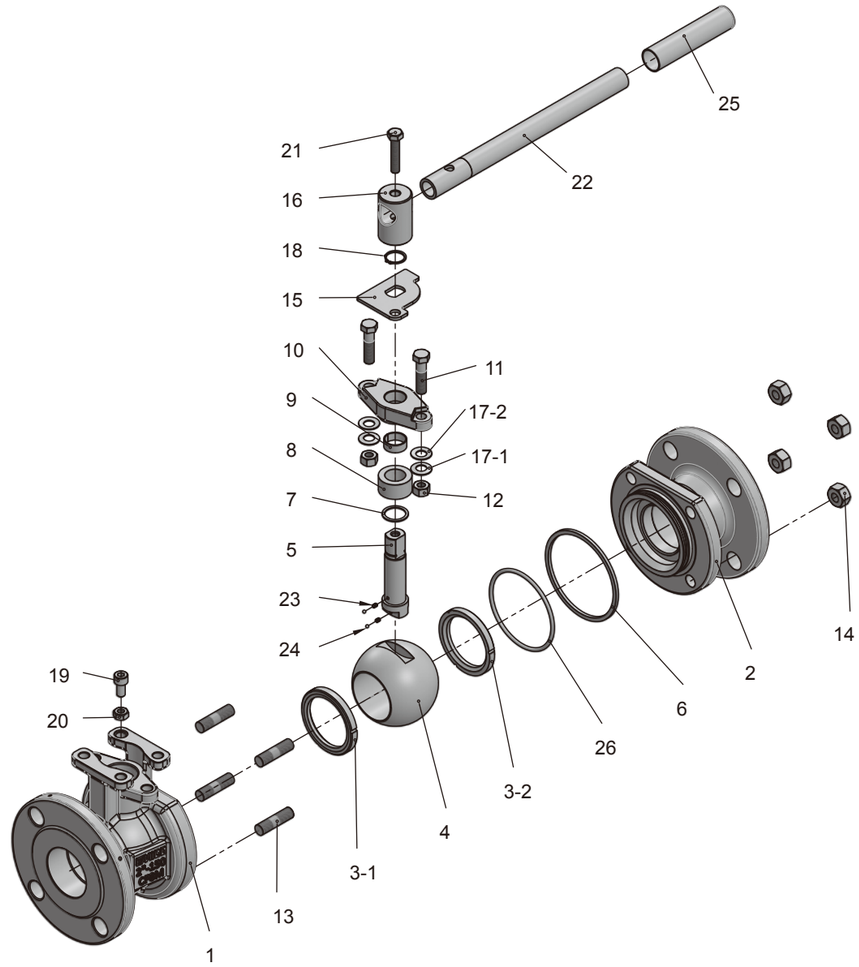
Before Fire



After Fire



MATERIAL COMPOSITION

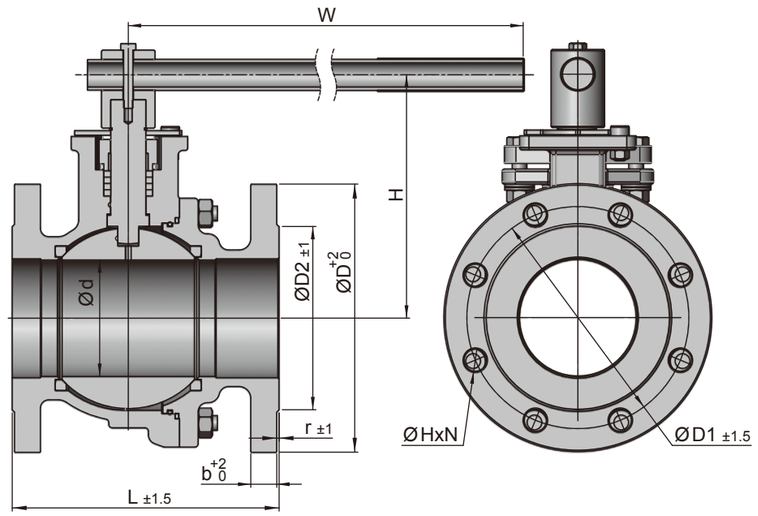


ITEM	PART NAME	STAINLESS STEEL	CARBON STEEL
1	Body	CF8M	WCB
2	End Cap	CF8M	WCB
3	Seat	PTFE+15% GF	PTFE+15% GF
4	Ball	CF8M	CF8M
5	Stem	SUS 316	SUS 316
6	Body Seal	316L+GRAPHITE	316L+GRAPHITE
7	Gasket	PTFE	PTFE
8	Packing	GRAPHITE	GRAPHITE
9	Stem Bearing	PTFE	PTFE
10	Gland Flange	SUS 304	SUS 304
11	Hex Bolt	A193-B8	A193-B8
12	Gland Nut	SUS 304	SUS 304
13	Stud	A193-B8M	A193-B7M

ITEM	PART NAME	STAINLESS STEEL	CARBON STEEL
14	Nut	A194-8M	A194-2HM
15	Stop Plate	SUS 304	SUS 304
16	T-Block	WCB	WCB
17	Disc Spring	SS 304	SS 304
18	Snap Ring	SUS 420	SUS 420
19	Stop Screw	SS 302	SS 302
20	Stop Nut	SS 304	SS 304
21	Hex Bolt	SUS 304	SUS 304
22	Pipe	CS+Zn Plated	CS+Zn Plated
23	Spring	SUS 316	SUS 316
24	Static Device	SUS 316	SUS 316
25	Pipe Cover	VINYL	VINYL
26	O-ring	VITON	VITON

We reserve the right to modify the design / specification without previous notice for better quality.

DIMENSION LIST



251 (Class 150)

SIZE	d	D2	D1	D	b	r	L	ØH-N	W	H	ISO5211
1/2"	16	34.9	60.3	90	8.5	2	108	16x4	136.5	91.6	F05
3/4"	20	42.9	69.9	100	8.9	2	117	16x4	136.5	91.6	F05
1"	25	50.8	79.4	110	9.6	2	127	16x4	186.5	107.9	F05
1-1/2"	38	73	98.4	125	12.7	2	165	16x4	230	119.8	F07
2"	50	92.1	120.7	150	14.3	2	178	19x4	230	138.5	F07
2-1/2"	65	104.8	139.7	180	15.9	2	190	19x4	350	170.4	F10
3"	80	127	152.4	190	17.5	2	203	19x4	350	190.3	F10
4"	100	157.2	190.5	230	22.3	2	229	19x8	400	208.8	F10
5"	127	185.7	216	255	22.3	2	356	22x8	400	233.5	F10
6"	152	215.9	241.3	280	23.9	2	394	22x8	800	279.8	F12
8"	203	269.9	298.5	345	27	2	457	22x8	1200	361.1	F14

253 (Class 300)

SIZE	d	D2	D1	D	b	r	L	ØH-N	W	H	ISO5211
1/2"	16	34.9	66.7	95	12.7	2	140	16x4	136.5	91.6	F05
3/4"	20	42.9	82.6	115	14.3	2	152	19x4	136.5	91.6	F05
1"	25	50.8	88.9	125	15.9	2	165	19x4	186.5	107.9	F05
1-1/2"	38	73	114.3	155	19.1	2	190	22x4	230	119.8	F07
2"	50	92.1	127	165	20.7	2	216	19x8	230	138.5	F07
2-1/2"	65	104.8	149.2	190	23.9	2	241	22x8	350	170.4	F10
3"	80	127	168.3	210	27	2	282	22x8	350	190.3	F10
4"	100	157.2	200	255	30.2	2	305	22x8	400	208.8	F10
5"	127	185.7	235	280	33.4	2	381	22x8	400	233.5	F10
6"	152	215.9	269.9	320	35	2	403	22x12	1200	323.1	F14
8"	203	269.9	330.2	380	39.7	2	502	25x12	1450	389.6	F16

256 (Class 600)

SIZE	d	D2	D1	D	b	r	L	ØH-N	W	H	ISO5211
1/2"	16	34.9	66.7	95	14.3	7	165	16x4	136.5	91.6	F05
3/4"	20	42.9	82.6	115	15.9	7	190	19x4	136.5	91.6	F05
1"	25	50.8	88.9	125	17.5	7	216	19x4	186.5	107.9	F05
1-1/2"	38	73	114.3	155	22.3	7	241	22x4	230	119.8	F07
2"	50	92.1	127	165	25.4	7	292	19x8	350	157.4	F07/F10
3"	80	127	168.3	210	31.8	7	356	22x8	400	198.5	F10
4"	100	157.2	215.9	275	38.1	7	432	25x8	800	254.8	F12

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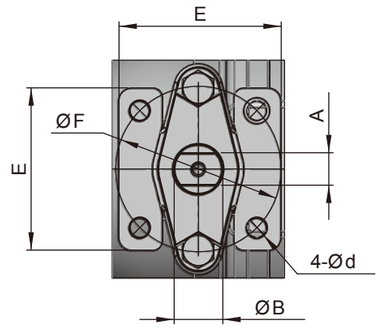
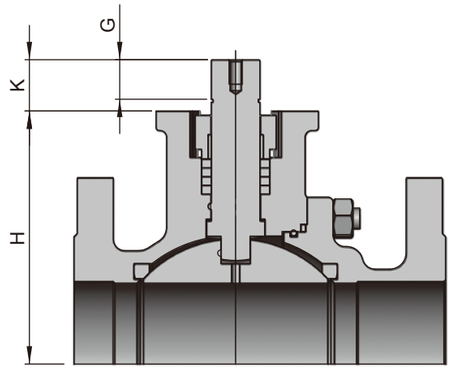
DIMENSIONS OF ISO MOUNTING PAD





251 (Class 150)

SIZE	A	B	d	E	F	G	K	H	ISO5211
1/2"	8	12.7	7	50	50	10	11	57.1	F05
3/4"	8	12.7	7	50	50	10	11	57.1	F05
1"	9	16	7	50	50	10	10.8	68.6	F05
1-1/2"	12	18	10	70	70	16.5	22.4	81.1	F07
2"	14	19	10	70	70	18.4	24.2	100	F07
2-1/2"	16	24	12	95.5	102	24.9	31.7	117.5	F10
3"	20	30	12	95.5	102	24.4	31.6	137.5	F10
4"	20	30	12	100	102	24.4	31.6	156	F10
5"	20	30	12	100	102	25.1	32.3	180	F10
6"	26	38	14	115	125	28.6	36.5	218	F12
8"	32	48	18	137.5	140	40	50.5	283	F14

253 (Class 300)

SIZE	A	B	d	E	F	G	K	H	ISO5211
1/2"	8	12.7	7	50	50	10	11	57.1	F05
3/4"	8	12.7	7	50	50	10	11	57.1	F05
1"	9	16	7	50	50	10	10.8	68.6	F05
1-1/2"	12	18	10	70	70	16.5	22.4	81.1	F07
2"	14	19	10	70	70	18.4	24.2	100	F07
2-1/2"	16	24	12	95.5	102	24.9	31.7	117.5	F10
3"	20	30	12	95.5	102	24.4	31.6	137.5	F10
4"	20	30	12	100	102	24.4	31.6	156	F10
5"	20	30	12	100	102	25.1	32.3	180	F10
6"	32	48	18	137.5	140	40	50.5	245	F14
8"	40	58	22	165	165	50.9	61.4	301	F16

256 (Class 600)

SIZE	A	B	d	E	F	G	K	H	ISO5211
1/2"	8	12.7	7	50	50	10	11	57.1	F05
3/4"	8	12.7	7	50	50	10	11	57.1	F05
1"	9	16	7	50	50	10	10.8	68.6	F05
1-1/2"	12	18	10	70	70	16.5	22.4	81.1	F07
2"	16	24	10/12	98	70/102	19.9	26.7	106	F07/F10
3"	20	30	12	102	102	25	32.3	145	F10
4"	26	38	14	115	125	28.2	36.1	193	F12

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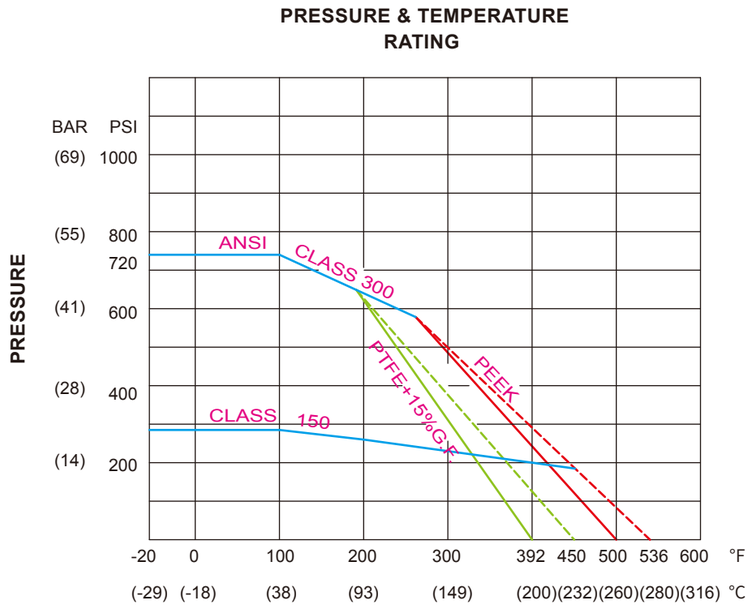
P/T CHART

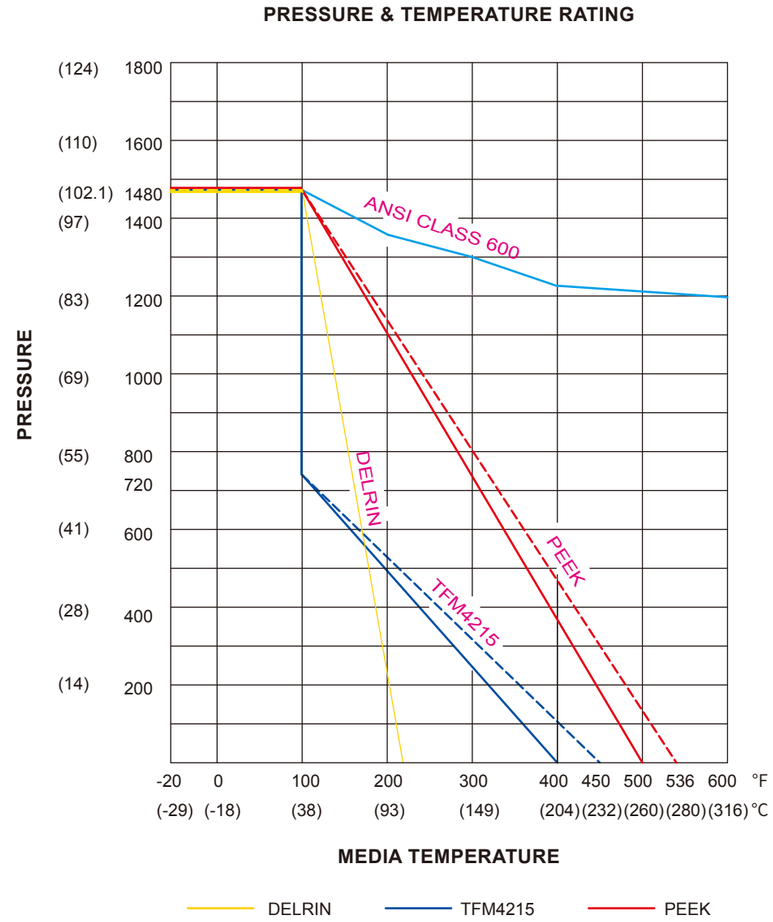
Fig. No.：251, 253



Remark:
1. It is recommended that the appropriate seat material, providing a higher pressure & temperature, is selected, if you feel the standard material is borderline and you prefer a larger safety allowance.
2. For steam service, options available are PEEK, PTFE+50%SS, or Metal seat, depending on the service application.
3. Final selection of seat material is the user's choice, experience & responsibility.
4. Solid Lines-Continous Temperature
   Dotted Lines-Intermittent / Peak Temperature

P/T CHART

Fig. No.：256



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