B107-1 EN METSO

WARNING:

As the use of the valve is application specific, a number of factors should be taken into account when selecting a valve for a given application. Therefore, some of the situations in which the valves are used are outside the scope of this manual. If you have any questions concerning the use, application or compatibility of the valve with the intended service, contact Metso for more information.

HOW TO ORDER

EXAMPLE: A 2" ASME Class 300 short design valve (730S) in *Fire-Tite* design with raised-face flanges (31), carbon steel body (22), and 316 stainless steel trim (36), with *Xtreme* seats (XTZ) and molecularly enhanced PTFE stem seals is written: 2"730S-31-2236XTZ1.

1	2	3	4	5	6	7	8
2"	7150	_	31	22	36	XTZ	1

1	Size					
	1/2"	(DN 15)	3"	(DN 80)	12"	(DN 300)
1/2"	3/4"	(DN 20)	4"	(DN 100)	14"	(DN 350)
to	1"	(DN 25)	6"	(DN 150)	16"	(DN 400)
20"	1-1/2"	(DN 40)	8"	(DN 200)	18"	(DN 450)
	2"	(DN 50)	10"	(DN 250)	20"	(DN 500)

2	Valve Series & Style	Size Range
7150	Reduced Bore Class 150	1/2" - 20" (DN 15 - 500)
7180 Reduced Bore Class 150*		1/2" - 20" (DN 15 - 500)
7300**	Reduced Bore Class 300	1/2" - 20" (DN 15 -500)
7380**	Reduced Bore Class 300*	1/2" - 20" (DN 15 -500)
730S***	Reduced Bore Class 300	1/2" - 12" (DN 15 -300)
738S**	Reduced Bore Class 300*	1/2" - 12" (DN 15 -300)

- Metric units on nameplate. Includes static grounding. Valves larger than 1" (DN 25) are CE marked.
- ** 18" (DN 450) Only available as 7300 or 7380.
- *** Special short pattern for the 730S or 738S uses a ASME Class 150 face to face.

3	Special Construction			
_	Standard (no entry)			
С	Chlorine			
DBB	Double Block and Bleed	Double Block and Bleed		
DT	125 RMS Flange Finish			
0	Oxygen			
Q	PTFE Cavity Filler			
STG	Static Ground (1/2" – 1-1/2" 9000) (N	ot for Emission-Pak)		
ST	Top Ground (1/2" – 1-1/2" 9000) (Not	for Emission-Pak)		
V	High Vacuum			
VC	High Vacuum Certified			
Emissio	<i>n-Pak</i> Coding			
LA	Standard w/o leakoff			
LL	Standard w/ leakoff			
LC	Chlorine w/o leakoff			
L1	Chlorine w/ leakoff			
L2	Static Ground w/o leakoff 1/2"-8" (DN 15 – 200) (1/2" – 2" 7000 ONLY) 7150/7180			
L3	Static Ground w/ leakoff 1/2"-6" (DN 15 – 150) (1/2" – 2" 7000 ONLY) 7300/730S/			
LV	High Vacuum w/o leakoff 7380/738S			
LB	High Vacuum w/ leakoff			
LW	High Vacuum Certified w/o leakoff			
LJ	High Vacuum Certified w/ leakoff			
LX	Oxygen w/o leakoff			
LG	Oxygen w/ leakoff			

4	End Connection	Size Range
11	Raised Face, Non-Fire-Tite,	1/2 – 10" (DN 15 – 250)
	Non-Trunnion	
31	Raised Face, Fire-Tite,	1/2 – 10" (DN 15 – 250)
	Non-Trunnion	
51	Raised Face, Non-Fire-Tite,	8 - 20" (DN 300 - 500) Class 150
	Non-Trunnion	6 - 20" (DN 300 - 500) Class 300
71	Raised Face, Fire-Tite,	10 – 20" (DN 200 – 500) Class 150
	Trunnion	8 – 20" (DN 250 – 500) Class 300

5	Body Material*
22 ⁵	Carbon Steel (WCB)
28	Carbon Steel (LCC)
35	Alloy 20 (CN7M)
36⁵	Stainless Steel (CF8M)
71 ⁵	Monel

* Other materials available upon request

6	Ball & Stem Materials*	
35	Alloy 20 (CN7M)	
36⁵	Stainless Steel (CF8M)	
71 ⁵	Monel & K Monel	
73	Hastelloy C	
HB⁵	316 SS & 17-4PH	Required for seat code LGG
00	Same as body	Carbon steel not available

 st Other materials available upon request

7	Seat Material*	Available Sizes
XTZ	Xtreme	All
BTT	PFA	1/2 – 8" (DN 15 – 200)
LGG ^{†12}	PEEK	1/2 – 6" (DN 15 – 150)
MBT ¹	Barrier Filled PTFE	4" – 13" (DN 100 – 300)
TTT	PTFE	All
UUU¹	UHMWPE	1/2 – 10" (DN 15 – 250)
ZTT	TFM	1/2" – 10" (DN 15 – 250)

- Other materials available upon request
- † Requires 17-4PH Stem
- 1 Non-Fire-Tite only
- Not a self relieving seat

8		Valve Body Bolting Materials		Valve Gland Bolting Materials	
	Studs	Nuts	Bolts/Studs	Nuts	
1	ASTM A193 Gr. B7	ASTM A194 Gr. 2H or 2HB	ASTM A193 Gr. B8, B8C, B8M or B8T, Class 2	ASTM A194 Gr. 8B, 8CB, 8MB, 8T8, 8FB	
2	ASTM A193 Gr. B8, B8C, B8M or B8T Class 2	ASTM A194 Gr. 8B, 8CB, 8MB, 8T8, 8FB	ASTM A193 Gr. B8, B8C, B8M or B8T, Class 2	ASTM A194 Gr. 8B, 8CB, 8MB, 8T8, 8FB	
4	K-Monel	K-Monel	K-Monel	K-Monel	
5	ASTM A193 Gr. B7M	ASTM A194 Gr. 2HM	ASTM A193 Gr. B8, B8C, B8M or B8T, Class 2	ASTM A194 Gr. 8B, 8CB, 8MB, 8T8, 8FB	
Н	Alloy 20	Alloy 20	Alloy 20	Alloy 20	

^{*} Other materials available upon request

- 4 1-1/2" and smaller NACE compatibility (if buried or insulated)
- 5 Material meets NACE requirements for sour environments. For valves to be in full compliance with NACE, both the body (sign #5) and trim (sign #6) must meet the NACE requirements.

9	Model*
А	1/2" – 2" (DN 15 – 50) 7000 (Non-Emission-Pak) 8" (DN 200) 7300, 7380, 730S, 738S 10" (DN 250) 7000 12" – 20" (DN 300 – 500) 7000
С	1/2" – 2" (DN 15 – 50) 7000 (Emission-Pak) 3" – 8"7150, 7180 (Non- Emission-Pak) 3" – 6"7300, 7380, 730S, 738S (Non- Emission-Pak) 3" – 8"7150, 7180 (Emission-Pak) 3" – 6"7300, 7380, 730S, 738S (Emission-Pak)

^{*} Model Code not required when ordering

^{**} Required for compliance to NACE for 2" and larger (if buried or insulated)