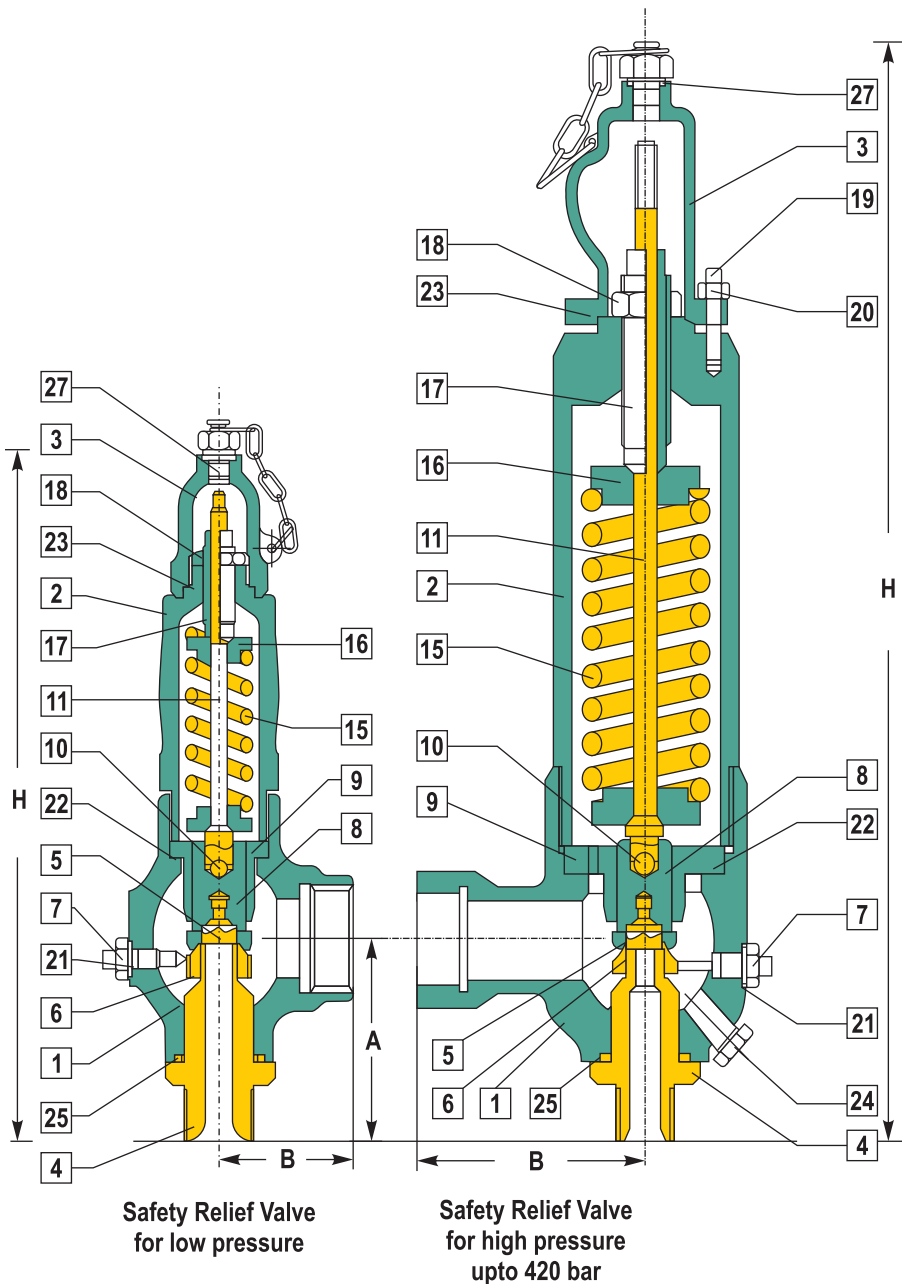


Spring Loaded Safety Relief Valves

SERIES : AK -11



FULL LIFT, FULL NOZZLE, PORTABLE
 SPRING LOADED SAFETY RELIEF VALVE
 FOR GAS, LIQUID & CRYOGENIC
 SERVICE. SIZE 1/2" TO 1 1/2". SET
 PRESSURE UPTO 420 BAR.
 TEMPERATURE UPTO 400°C



DESIGN FEATURE

- End connection screwed (BSP or NPT) or flanged
- Adjustable blow down ring
- Inlet connection screwed male or female
- Screwed Full Nozzle
- Flanges according to ANSI B 16.5
- Metal to Metal OR Soft Seat
- Suitable for Thermal Relief applications
- Valve sizing in accordance with standard API-520, Part-I (Using API-520 Coefficient & effective discharge area as per API-526)
- Special materials (Included compliance to NACE MR 0175)

CONSTRUCTION

Body Materials

- Carbon Steel / LTCS (Killed)
- Stainless Steel (SA 351 CF8M/ 3M)
- Exotic Material

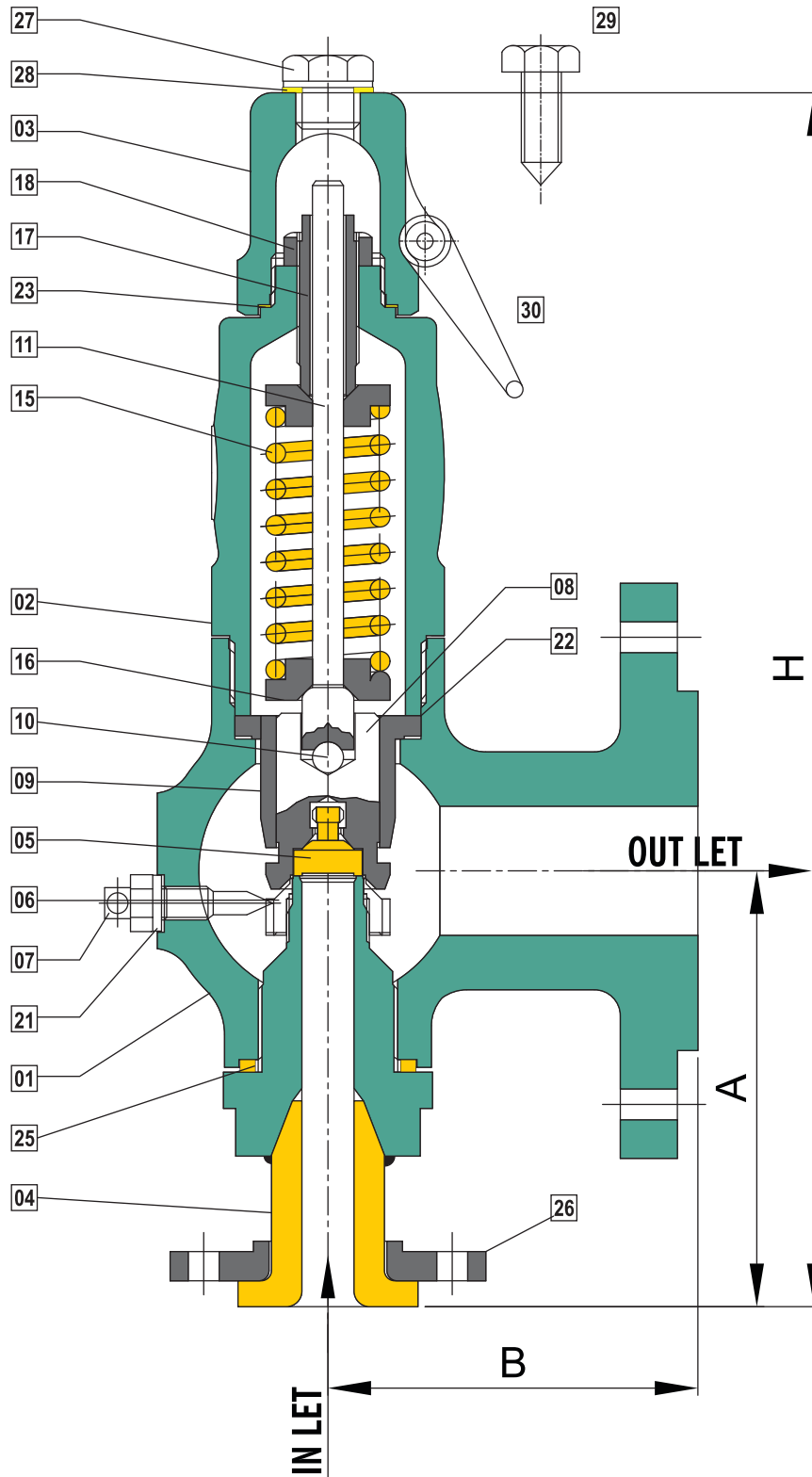
ACCESSORIES / OPTIONS

- Test Gag
- Lifting Lever (Packed only)
- Nozzle & Disc Stellite

 Recommended Spare Parts

Spring Loaded Safety Relief Valves

SERIES : AK -11



PRESSURE/SAFETY RELIEF VALVES SCREWED & FLANGED TYPE

SERIES : AK-11

PART LIST		MATERIALS	
POSITION	DESCRIPTION	STAINLESS STEEL LOW TEMP - 29° C TO + 250° C	CARBON STEEL TEMP - 29° C TO + 250° C
01	BODY	A 351 Gr. CF8M / 3M	A 216 Gr. WCB
02	BONNET	A 351 Gr. CF8M / 3M	A 216 Gr. WCB
03	CAP	A 351 Gr. CF8M / 3M	A 216 Gr. WCB
04(R)	NOZZLE	SS 316 / 316 L	AISI 316
05(R)	DISC	SS 316 / 316 L	AISI 316
06	NOZZLE RING	A 351 Gr. CF8M / 3M	A 351 Gr. CF8M
07	NOZZLE RING PIN	SS 316	SS 316
08	PISTON	SS 316	SS 316
09	GUIDE	SS 316 / CF8M / 3M	SS 316 / CF8M
10	BALL	SS 304	SS 304
11	SPINDLE	SS 316	SS 316
15(R)	SPRING	SS 316	SS 316
16	SPRING WASHER	SS 316	SS 316
17	ADJUSTING SCREW	SS 316	SS 316
18	LOCK NUT	SS 316	SS 316
19/20	CAP -BONNET FASTENER	SS 304	CS
21	SET SCREW GASKET	PTFE	PTFE
22	GUIDE GASKET	PTFE	PTFE
23(R)	CAP GASKET	PTFE	PTFE
24	DRAIN PLUG	SS 304	SS 304
25(R)	NOZZLE GASKET	SS 316	SS 316
26	FLANG (LAPPED)	A182 G.316 / 316L	A 105
27	CAP PLUG	SS	CS
28(R)	CAP PLUG GASKET	PTFE	PTFE
29	TEST GAG	SS	CS
30	LEVER ASSEMBLY	A 479 304	A 479 304

® Recommended Spare Parts
- Other Materials (Super Alloy) on Request

PRESSURE/SAFETY RELIEF VALVES

SCREWED & FLANGED TYPE

SERIES : AK-11

SIZES - SCREWED TYPE

ORIFICE		PRESSURE CLASS	CONNECTION - BSP/NPT		MAX SET PRESSURE AT 38 °C (BAR-g)	DIMENSION - SCREWED CONNECTION				APPROX WEIGHT KG
Designation	Eff. Area (cm2) SQ inch		Inlet Male	Outlet Female		±3 A mm	±3 B mm	H mm (±20)		
								Non - Lever Type	Lever Type	
B	(0.28) 0.044	4	1/2"	1/2"	153	51	40	212	265	2.5
		4	1/2"	3/4"	153	51	40	212	265	2.5
		4	1/2"	1"	153	51	40	212	265	2.5
		4	3/4"	1"	153	51	40	212	265	2.5
		4	1"	1"	153	56	40	212	265	2.5
		6	3/4"	1"	420	64	85	332	332	6
		6	1"	1"	420	70	85	338	338	7
D	(0.71) 0.11	3	*1/2"	1"	102	64	50	223	276	3
		3	3/4"	1"	102	64	50	223	276	3
		3	1"	1"	102	70	50	223	276	3
		5	3/4"	1"	255	64	85	332	332	6
		5	1"	1"	255	70	85	338	338	7
E	(1.26) 0.196	2	3/4"	1"	51	64	50	224	277	3
		2	1"	1"	51	70	50	224	277	3
		4	3/4"	1"	153	64	85	332	332	6
		4	1"	1"	153	70	85	338	338	7
F	(1.98) 0.307	2	1"	1.5"	51	91	60	291	344	6
		2	1.5"	1.5"	51	91	60	291	344	6
G	(3.24) 0.503	1	1"	1.5"	19.6	91	60	291	344	6
		1	1.5"	1.5"	19.6	91	60	291	344	6

* : NOT IN BSP MALE

SIZES - FLANGE TYPE

ORIFICE		PRESSURE CLASS	CONNECTION				MAX SET PRESSURE AT 38 °C (BAR-g)	DIMENSION - FLANGE CONNECTION				APPROX WEIGHT KG
Designation	Eff. Area (cm2) SQ inch		N.D. Inlet	N.D. Outlet	Inlet Class	Outlet Class		±3 A mm	±3 B mm	H mm (±20)		
										Non - Lever Type	Lever Type	
B	(0.28) 0.044	4	1/2" / 3/4" / 1"	1"	150	150	19.7	98	85	261	314	6
		4			300	150	51	98	85	261	314	6
		4			600	150	102.1	98	85	261	314	6
		4			900	150	153.1	98	90	261	314	8
		6			1500	300	255.5	118	120	390	390	11
		6			2500	300	425.5	118	120	390	390	12
D	(0.71) 0.11	3	1/2" / 3/4" / 1"	1"	150	150	19.7	98	85	260	312	7
		3			300	150	51	98	85	260	312	7
		3			600	150	102.1	98	85	260	312	7
		5			900	150	153.1	118	120	390	390	11
		5			1500	300	255.5	118	120	390	390	12
E	(1.26) 0.196	2	3/4" / 1"	1"	150	150	19.7	98	85	260	312	7
		2			300	150	51	98	85	260	312	7
		4			600	150	102.1	118	120	390	390	11
		4			900	150	153.1	118	120	390	390	11
F	(1.98) 0.307	2	1" / 1 1/2"	1 1/2"	150	150	19.7	118	100	318	371	10
		2			300	150	51	118	100	318	371	10
G	(3.24) 0.503	1	1" / 1 1/2"	1 1/2"	150	150	19.7	118	100	318	371	10

PRESSURE/SAFETY RELIEF VALVES

SCREWED & FLANGED TYPE

SERIES : AK-11

CODIFICATION NUMBERING SYSTEM

OFFICE SYMBOL	PRESSURE CLASS	INLET SIZE	CONNECTION
As per API 526 IN SAMPLE CODE D - ORIFICE "D" OTHER OPTIONS B, D, E, F, G	(BAR G) IN SAMPLE CODE 3-102 OTHER OPTIONS 1 - 19.6 4 - 153 2 - 51.0 5 - 255 3 - 102 6 - 420	(flanged or screwed male / female) IN SAMPLE CODE G-¾" OTHER OPTIONS F - ½"; G - ¾" H - 1"; K - 1 ½"	IN SAMPLE CODE N-NPT OTHER OPTIONS N-NPT K-BSP A-Flanges

POSTION NO.:	1	2	3	4	5	6	7	8	9	10	11									
SAMPLE CODE :	AK11	-	D	-	A	-	3	-	P	-	G	-	H	-	N	-	R	-	-	-
TRY A CODE :		-		-		-		-		-		-		-		-		-	-	-

DESIGNATION
1 - AK-11 Series

BODY MATERIAL
IN SAMPLE CODE A-Carbon Steel OTHER OPTIONS B-LCB C-SS316 D-SS316L E-SS304 F-SS304L O-OTHER (EXOTIC MATERIAL)

SPRING MAT
IN SAMPLE CODE P-SS304 OTHER OPTIONS C-Carbon Steel I-Inconel P-SS304 Q-SS316 T-Tungsten Alloy

OUTLET SIZE
(flanged or screwed male / female) IN SAMPLE CODE H-1" OTHER OPTIONS F - ½"; G - ¾" H - 1"; K - 1 ½"

ACCESSORIES & OTHER REQ. IN SAMPLE CODE
R-Soft Seal OTHER OPTIONS A-Without Accessories F-Packed Lever S-Stellited Disc & Nozzle V-Test Gag SP-Special Requirements