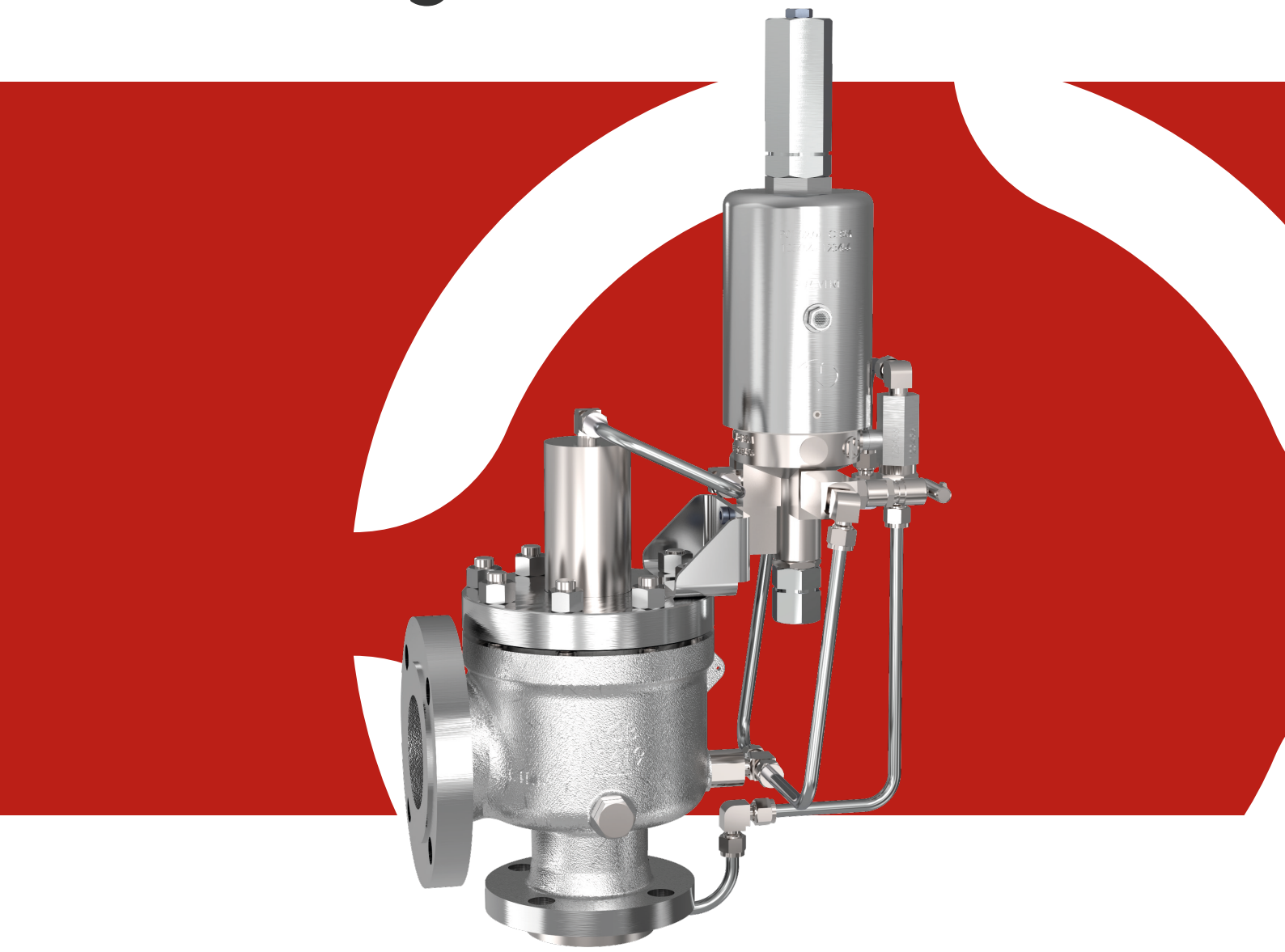
ValNac

Safety Valves

www.valnacsafety.com

Pilot Operated **Safety Relief Valve**



Making excellence
something personal

The Company

ValNac, Safety Valves was established in Spain in 1976 with the aim to assist the petrochemical and chemical industries emerging in Spain at that time.

Since its integration into the Pekos Ball Valves, the R&D department together with the Technical Office have been immersed in the development of new products that provide the best and most optimal security solutions for our customers.

The result in this case is the new pilot valve that we present.

General Features

European Directive	2014/68/UE 2014/34/UE (ATEX)
Design	ISO 4126-1, ISO 4126-4, API 526, ASME VIII Div.1 and ASME XIII
Certifications	PED MODULE B+D / ASME “UV” and NB”
Pressure and Temperature Ratings	EN 12516-1 & ASME B16.34
Tests	ISO 4126-1, ISO 4126-4 and ASME XIII
Quality System	EN ISO 9001:2015
Materials	ASME/ASTM and EN

Sizes And Ratings*

Standard

ASME	
Sizes:	1” x 2” up to 8” x 10”
Rating:	150# up to 2500#

*EN Flanges and other connections upon request

Performance

Pilot action type	Snap / Pop	Modulating
Type	Non flowing	Non flowing
Pressure range [bar g]	3.5 ÷ 103,4	1 ÷ 103,4
Full open - overpressure	2%	5% (1)
Backpressure	80% (2)	75% (3)
Maximum pressure at pilot outlet	65% of Pset	65% of Pset
Min ÷ Max relieving temperature [°C (°F)]	-45 ÷ 245	-45 ÷ 245
Media	Gas ÷ Steam	Gas ÷ Steam ÷ Liquid

(1) 0,1 bar g, whichever is greater
(2) Minimum 2 bar g difference between Set Pressure and Backpressure
(3) Minimum 2,5 bar g difference between Set Pressure and Backpressure

Accesories

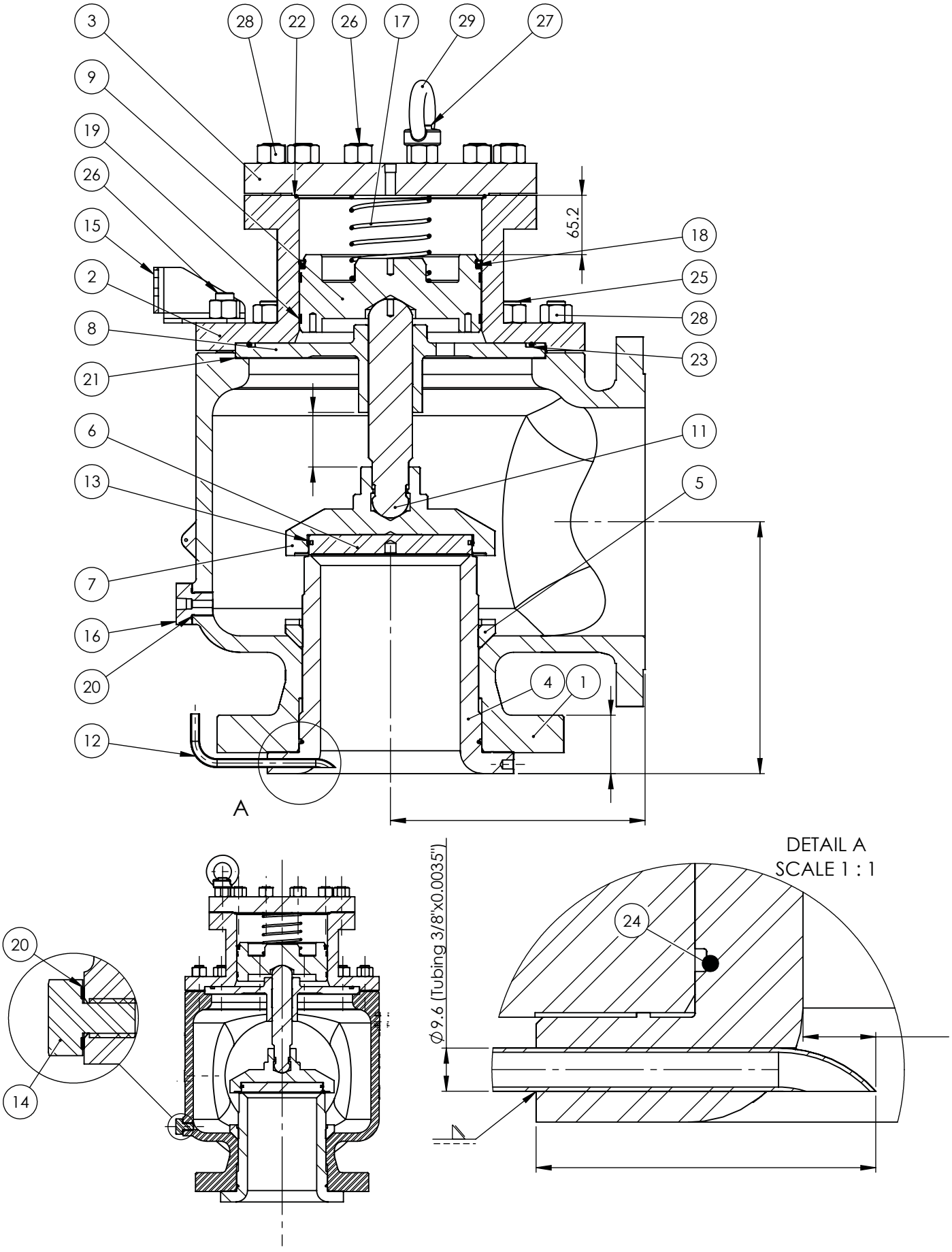
	Snap/Pop			Modulating		
	Available	Built -in	Standard	Available	Built -in	Standard
Back-Flow Preventer	■	■			■	
Field Test Arrangement	■			■		
Lifting Lever	■		Over 60°C (140°F)	■		Over 60°C (140°F)
Manual Blowdown Valve	■		For steam service	■		For steam service
Internal Pressure Pick-up	■			■		
Remote Sensing	■			■		
Device for remote warning of valve opening	■			■		

Bill of Materials - Main valve

ITEM	CLASS	H	E
TC(0)	CLASS TEMP.	-45 ÷ 245	-45 ÷ 245
TS	VALVE DESIGN TEMP.		
1	BODY	"SA 216 WCB / WCC SA 216 LCB /LCC"	SA 351 CF8M
2	BONNET DOME	SA 479 316	SA 479 316
3	BONNET DOME TOP FLANGE		
4	NOZZLE	SEE SUB CLASS	
5	DISC		
6	NOZZLE BLOCK RING	A 479 316	A 479 316
7	DISC HOLDER		
8	GUIDE		
9	PISTON	SA 479 316	SA 479 316
10	TOP PISTON	A 479 316	A 479 316
11	PUSH ROD	A 479 316	A 479 316
12	PITOT FOR NOZZLE	SA 479 316 (TUBING)	SA 479 316 (TUBING)
13	ELASTING RING	AISI 316	AISI 316
14	DRAIN PLUG	SA 479 316	SA 479 316
15	BRACKET FOR PILOT	A 240 316	A 240 316
16	PILOT VENT	SA 479 316	SA 479 316
17	PISTON SPRING RETURN	A313 Type 316 (1)	A313 Type 316 (1)
18	SPRING-ENERGIZED SEAL	PTFE	PTFE
19	SLYDRING RING	TURCITE	TURCITE
20	DRAIN GASKET	Graphite+316 S.S.	
21	GUIDE GASKET		
22	DOME TOP FLANGE SEAL O-RING	"FKM / FPM (MAX. TC=200°C) FFKM (MAX. TC=245°C)"	"FKM / FPM (MAX. TC=200°C) FFKM (MAX. TC=245°C)"
23	BONNET DOME vs GUIDE SEAL /O-RING		
24	NOZZLE vs BODY SEAL O-RING		
25÷27	STUD	SA 193 B8M Cl.2 (A4-70)	SA 193 B8M Cl.2 (A4-70)
28	NUT	SA 194 8M (A4-70)	SA 194 8M (A4-70)
29	LIFTING EYE	AISI 316	AISI 316

SUBCLASS		1	2
4	NOZZLE	SA 479 316	SA 479 316 + ST
5	DISC	SA 479 316	SA 564 630 (4)

(0) If a subclass is defined, the class temperature range will be restricted by the most restrictive temperature limits.
(1) For NACE compatibility change with INCONEL X-750
Other material combinations are available upon request.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65.2
A
20
14
DETAIL A
SCALE 1 : 1
24
Ø9.6 (Tubing 3/8"x0.035")

Bill of Materials - Pilot

ITEM		CLASS	MATERIAL
	TC(0)	CLASS TEMPERATURE RANGE	-45 ÷ 245
	TS	VALVE DESIGN TEMPERATURE RANGE	
PILOT	1	PILOT BASE	SA 351 CF8M
	2	VENTED BONNED	
	3	CAP	A 479 316
	4	ADJUSTER CAP	SA 479 316
	5	ADJUSTER LOCK NUT	
	6	ADJUSTER BOTTOM	
	7	ADJUSTER TOP	
	8	INSERT BOTTOM	
	9	INSERT TOP	
	10	MAIN PISTON	
	11	TOP PLATE	
	12	BOTTOM SPRING WASHER	A 479 316
	13	PILOT SPRING	CROME ALLOY (1)
	14	TOP SPRING WASHER	SA 479 316
	15	COMPRESSION LOCK NUT	
	16	COMPRESSION SCREW	
	17	DRIVE PIN	
MODULATOR	18	MODULAR STOP	SA 351 CF8M
	19	MODULAR BASE	
	20	MODEULADOR PISON TOP	SA 479 316
	21	MODEULADOR PISON BOTTOM	
	22	O-RING RETAINER	
FIELD TEST CONN. & SUPP. BACKFLOW PREV.	23	BOTTOM FIELD TEST CONNECTOR	SA 479 316
	24	SPJERE FIELD TEST CONNECTOR	A 479 316
	25	FILTER GUIDE FIELD TEST CONNECTOR	AISI 316
	26	TOP FIELD TEST CONNECTOR	SA 351 CF8M
COMMON PARTS	27÷30	SPRING-ENERGIZED SEALD	PTFE
	31÷36	O-RING	FKM / FPM (MAX. TC=200°C) FFKM (MAX. TC=245°C)
	37÷38	BOLTING	SA 193 B8M Cl.2
	39	BOLTING	A 193 B8M Cl.2
	40÷41	BOLTING	SA 193 B8M Cl.2
	42	GRUB SCREW DIN 913	A 193 B8M Cl.2

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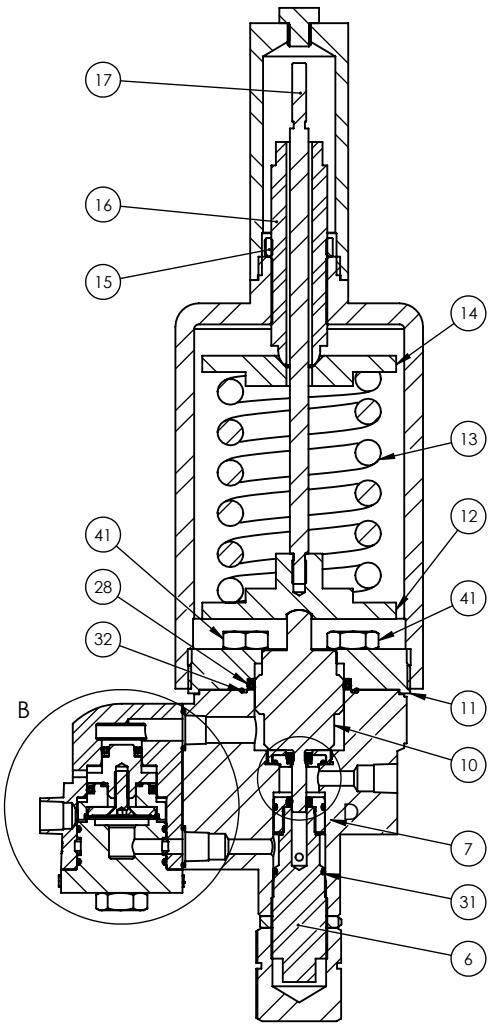
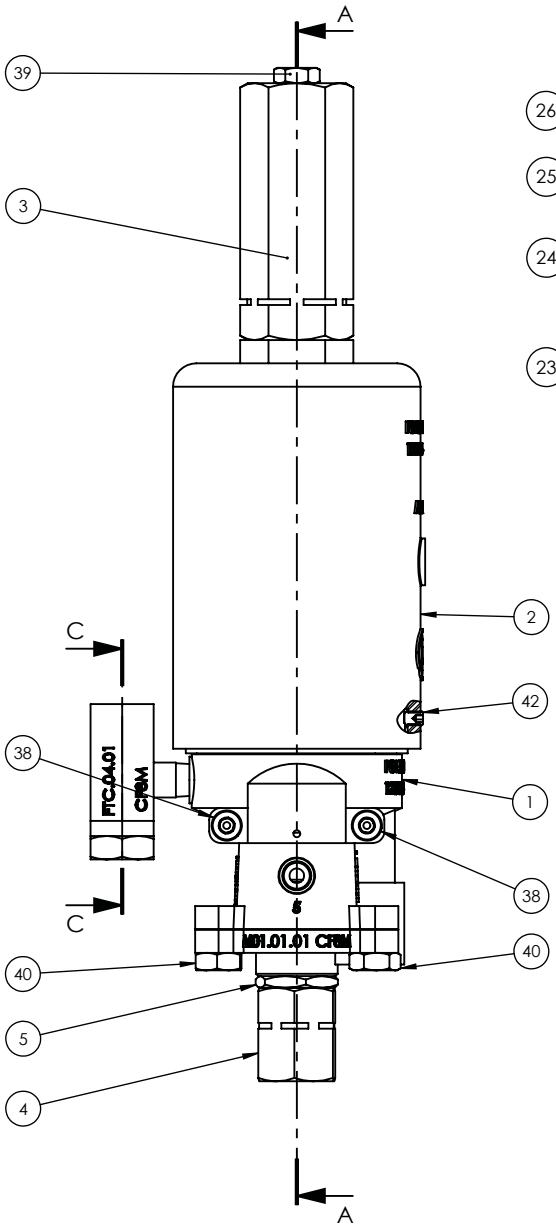
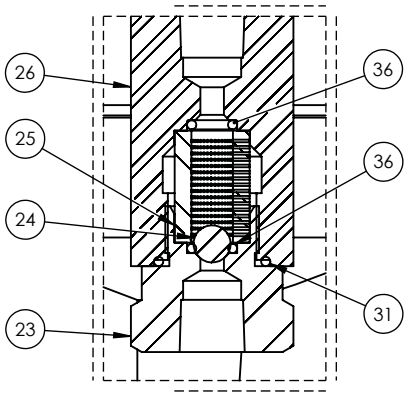


SECTION A-A

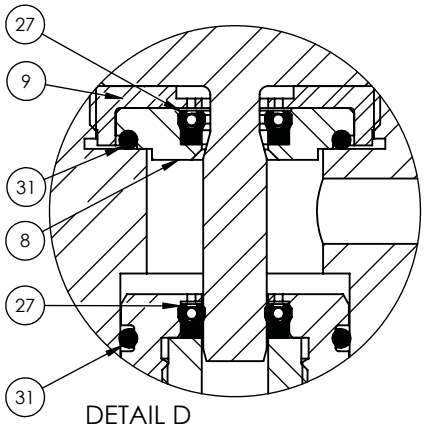
SCALE 1 : 2





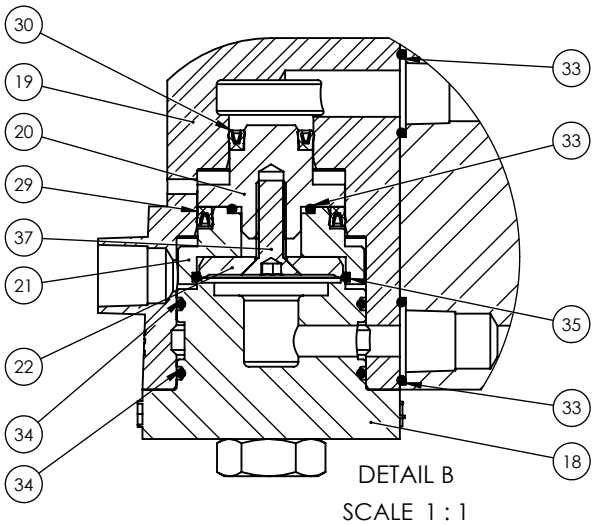
SECTION C-C

SCALE 1 : 1



DETAIL D

SCALE 2 : 1



DETAIL B

SCALE 1 : 1

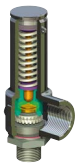
Making safety since 1976

MOD-6400 ASME UV

SAFETY VALVE

MOD-5100 ASME UV

SAFETY VALVE



MOD-3-50

SAFETY VALVE

MOD-3-51

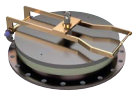
SAFETY VALVE

MOD-5500

SAFETY VALVE

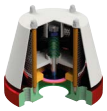
PILOT OPERATED

SAFETY VALVE



MOD-2000

EMERGENCY VALVE



MOD-3400

BREATHER VALVE

VALVE SILENCER

ValNac
Safety Valves

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