
Perar
Compact Trunnion Mounted
Side Entry Ball Valves
Perar
THAT'S QUALITY
The Best Guarantee of Safety

Perar Ball Valves, One of the first.... since 1962

Founded in 1962, Perar is one of the first Italian Manufacturers of High Quality Ball Valves.
The development of the company started as leading supplier in Gas Industry, all over the domestic market.
In the following years, Perar, has experienced a continuous and steady growth in the areas of world-wide sales, production capacity, efficiency and technological development.

Perar today is one of the leading Italian manufacturers of High Quality Industrial Valves for a wide variety of applications in various fields like Oil, Gas, Petrochemical, On-Off Shore, Heavy Chemicals, and over…

Perar production includes Ball Valves in sizes from 1/2" to 60". Ansi classes 150 to 2500 and Api 2000 to Api 20000, in Carbon Steel, Stainless Steel, Duplex Steel, Super Duplex Steel, Alloy Steel, Incoloy, Monel, 6Mo, Titanium, and various others…
The construction available are:

Floating Design
Trunnion Mounted Side Entry
Trunnion Mounted Top Entry
Metal Seated
Sub-sea and Cryogenic
Bolted and Fully-Welded Body.


Perar

Perar Design Features - Compact Ball Valves

Three pieces side entry design with trunnion mounted or support plate configuration.

Drive train mechanism sized to safely withstand the maximum torque loads exerted by the different operating systems.

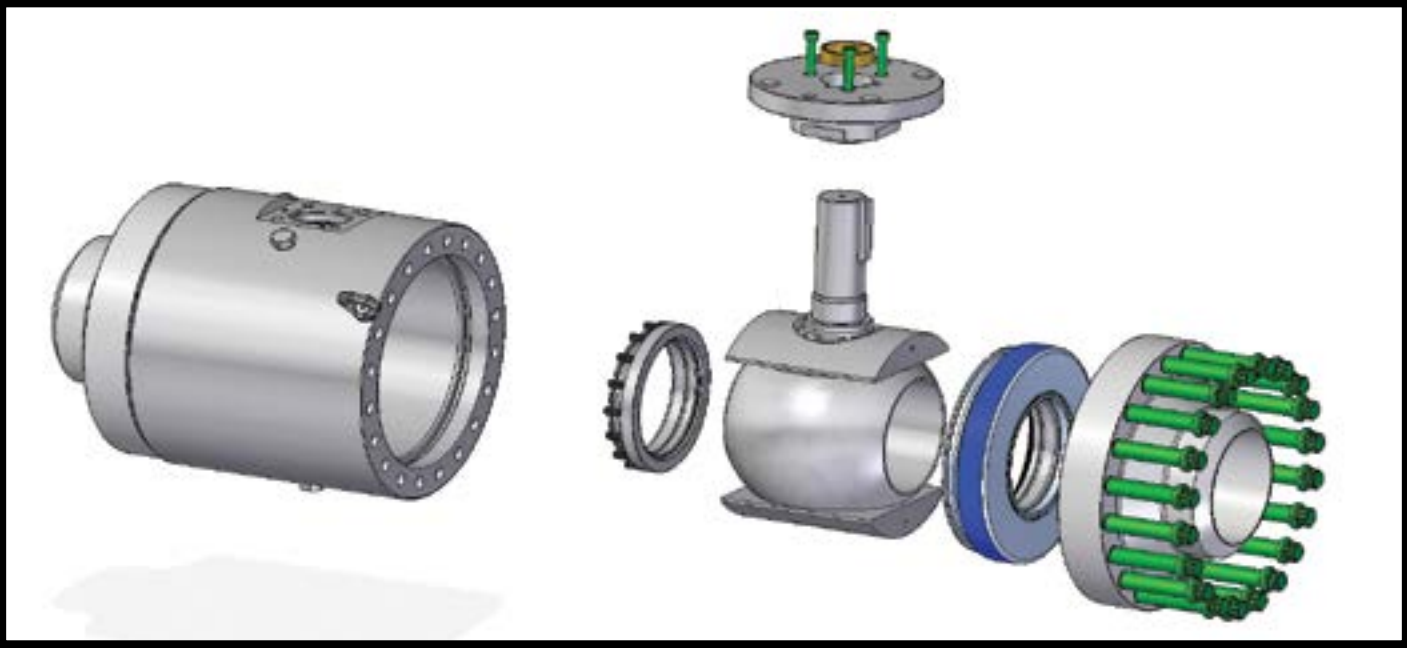
Valve stem retained by a shoulder on the body.

The valve has threaded end closures that accommodates the end flange connection to mount directly to the valve body, securing the compact design without loss of pressure

End flanges are designed and checked in fully compliant to ASME B31.3 and ASME B31.8

Hard-faced metal seated design is an option to the standard soft insert seat-to-ball sealing system

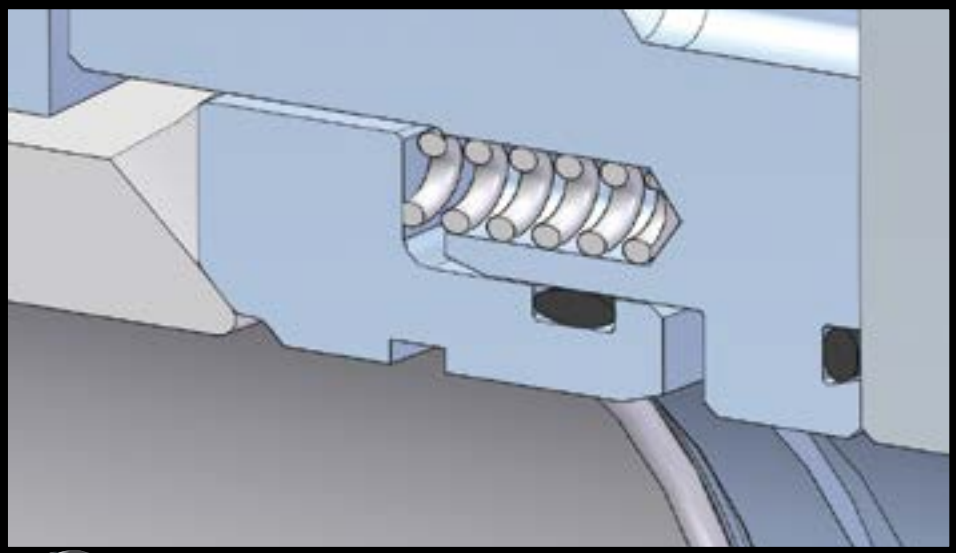
Perar - Technical Seating Features



Perar Compact Ball Valves are designed according to API6A to combine a compact design with robustness and reliable performances. The valves do not rely on lubricant or grease to assist sealing between the ball and seat also when metal-to-metal sealing is used. The valve design is based on trunnion mounted or support plate configuration in order to get the operating torque as lower as possible.

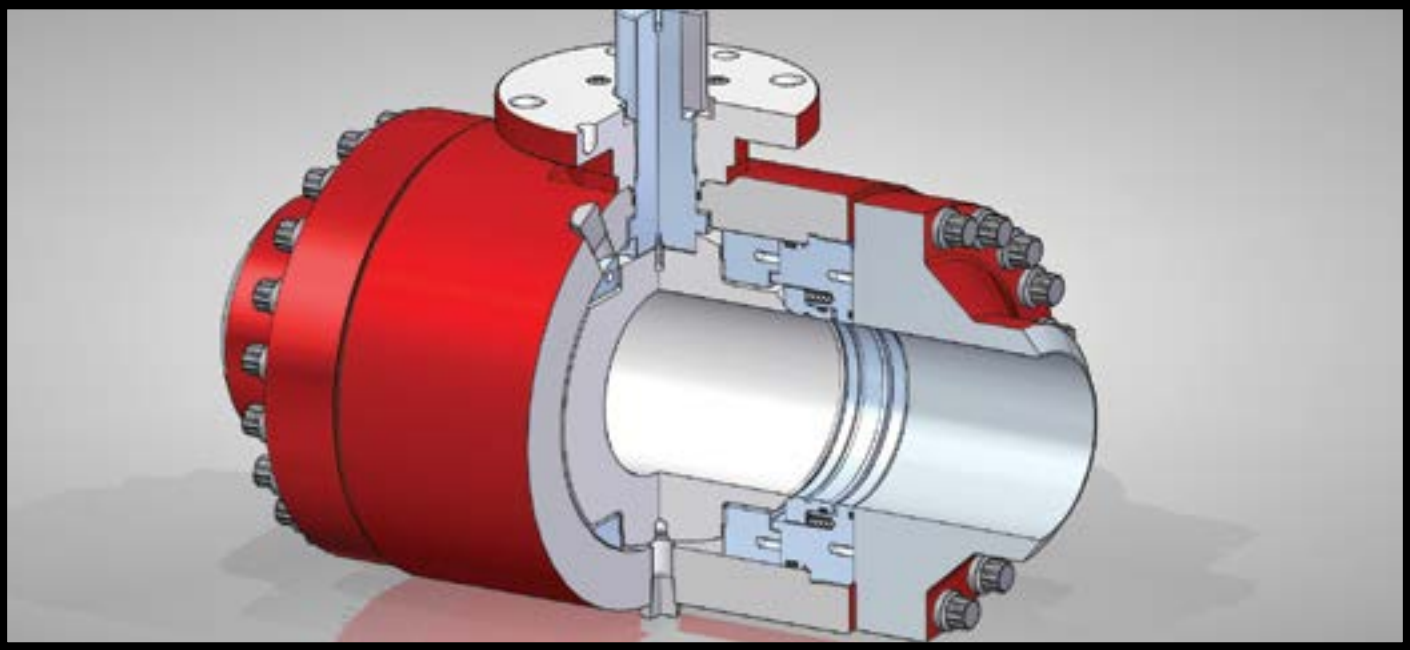
COMPACT DESIGN

Three pieces side entry design with trunnion mounted or support plate configuration. Trunnion mounted/support plated ball reduces the operating torque if compared to a floating valve.



SEAT DESIGN

Hard-faced metal seated design is an option to the standard soft insert seat-to-ball sealing system. All seats and balls are designed and optimized for metal-to-metal sealing configuration and the soft sealing trim can be easily replaced by a metal sealing system.

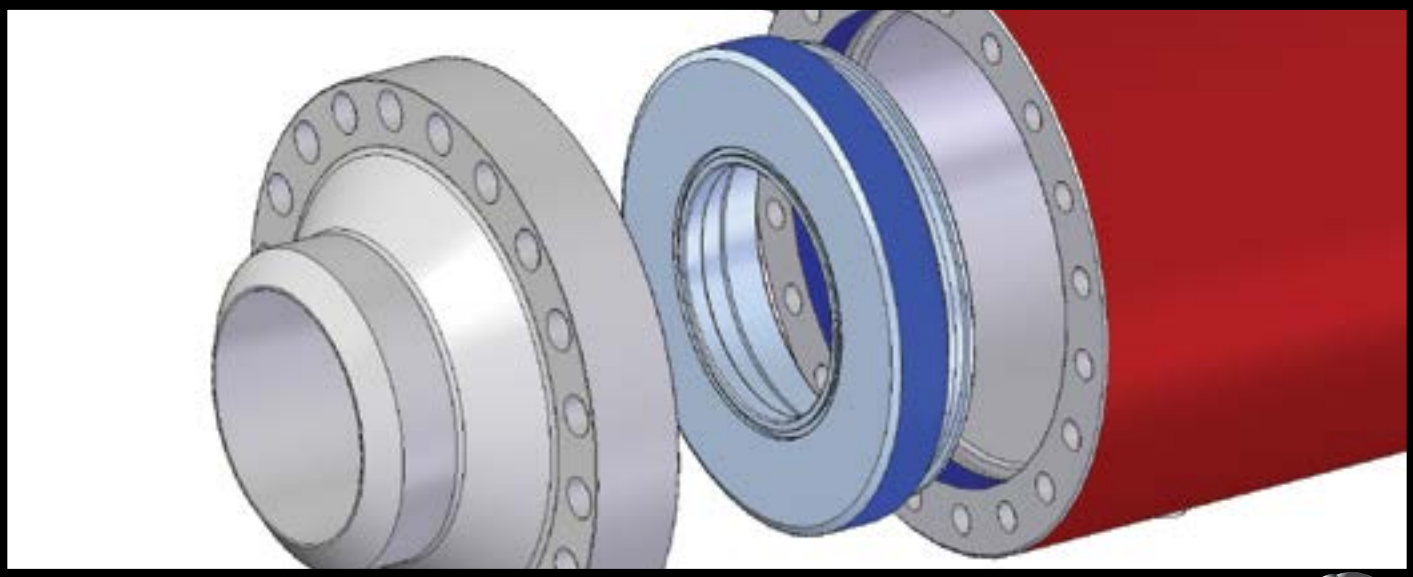


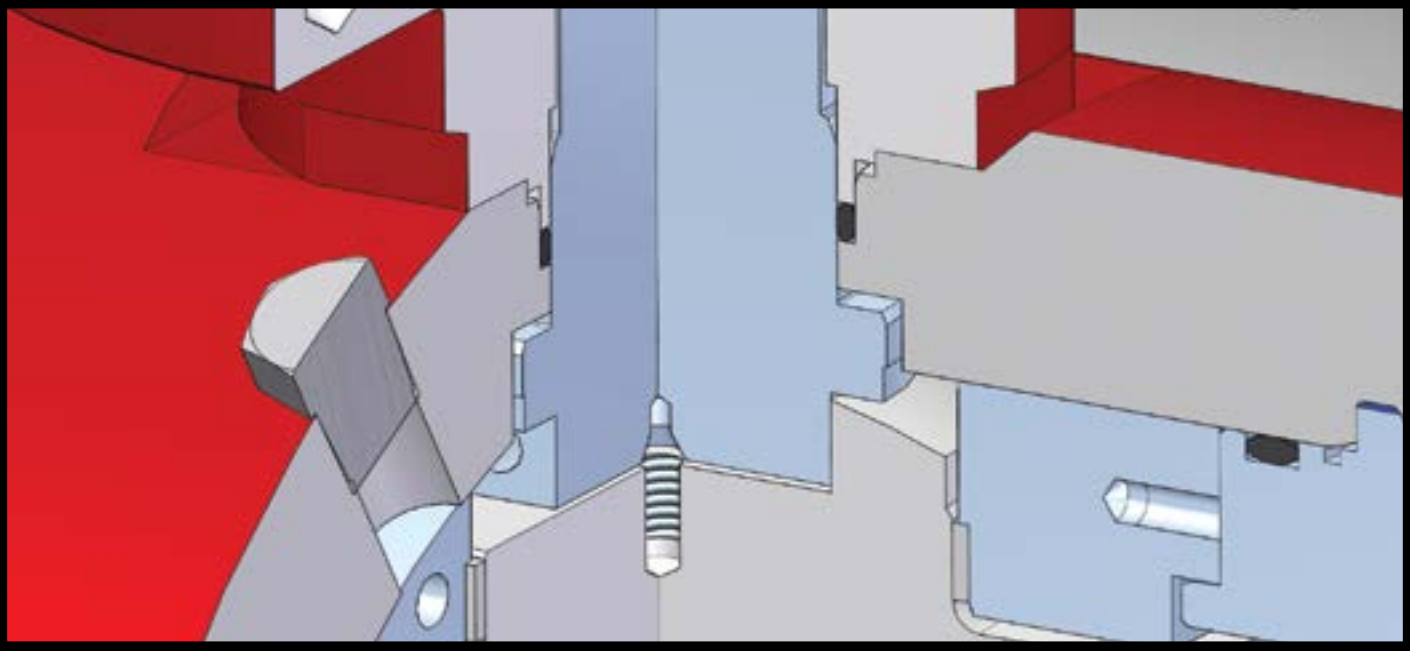
VALVE PIGGING

Valve is suitable for bi-directional pigging being the base design a full bore; the valve bores are based on existing piping schedule in order to minimize pressure drops or erosion due to transition areas, but tapered transition can be provided to match non-standard pipe schedules.

END CLOSURE DESIGN

The valves have a threaded end closure that get the valve compact and allow for end flange connection directly to the valve body without any loss of pressure containing capability.



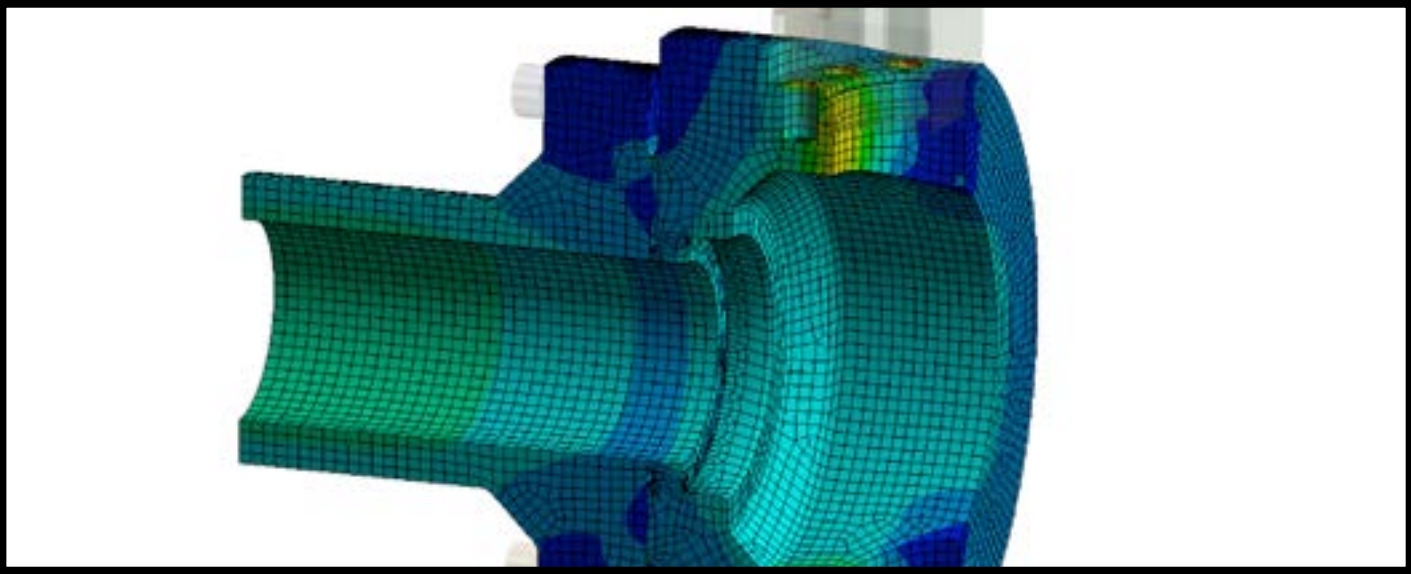


ANTI BLOW-OUT STEM

Valve stem retained by a shoulder on the body. The anti-blowout system do not rely on bonnet or gland plates.

END FLANGE DESIGN

End flanges are designed and checked with sophisticated FE simulation and the butt welded connection to the pipe is fully compliant to ASME B31.3 and ASME B31.8. The welding neck is optimized to allow the valve and the flange to withstand a bending load up to 100% of pipe yield at full working pressure assuming a pipe yield of 60000 psi.



Applicable Standards

API - American Petroleum Institute

API6A	Specification for Wellhead and Christmas Tree Equipment

ASME/ANSI - American Standard Institute

ASME VIII	ASME Boiler and Pressure Vessel Code: Rules for Construction of Pressure Vessels, Edition 2004 with 2005 and 2006 addenda, Section VIII, Division 2
ASME B31.3	Process Piping
ASME B31.8	Gas Transmission and Distribution Piping Systems

ASTM - American Society for testing materials

ASTM A182	Standard Spec.for Forged or Rolled Alloy and Stainless Steel Pipe Flanges, Forged Fittings, and Valves and Parts for High-Temperature Service
ASTM A694	Standard Specification for Carbon and Alloy Steel Forgings for Pipe Flanges, Fittings, Valves, and Parts for High-Pressure Transmission Service
ASTM A350	Standard Specification for Carbon and Low-Alloy Steel Forgings, Requiring Notch Toughness Testing for Piping Components
ASTM A320	Standard Specification for Alloy-Steel and Stainless Steel Bolting for Low-Temp. Service
ASTM A193	Standard Specification for Alloy-Steel and Stainless Steel Bolting for High Temperature or High Pressure Service and Other Special Purpose Applications
ASTM A370	Standard Test Methods and Definitions for Mechanical Testing of Steel Products
ASTM A453	Standard Specification for High-Temperature Bolting Materials, with Expansion Coefficients Comparable to Austenitic Stainless Steels
ASTM B446	Standard Specification for Nickel-Chromium-Molybdenum-Columbium Alloy (UNS N06625), Nickel-Chromium-Molybdenum-Silicon Alloy (UNS N06219), and Nickel-Chromium-Molybdenum-Tungsten Alloy (UNS N06650)* Rod and Bar

ISO - International Organization for Standardization

ISO 10423:2009	Petroleum and natural gas industries—Drilling and production equipment— Wellhead and christmas tree equipment
ISO 15156	(NACE MR0175) Sulphide Stress Cracking Resistant Materials for Oil Field Equipment
ISO 5208	Industrial valve – Pressure testing of valves
ISO 10497	Testing of valves - Fire type-testing requirements

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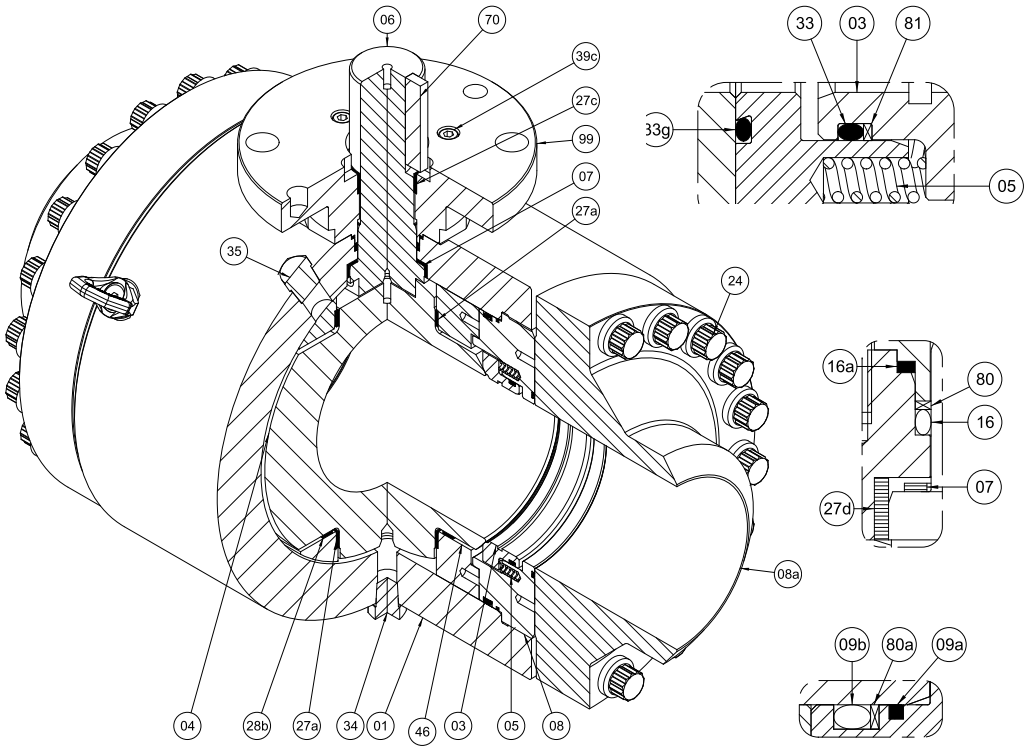
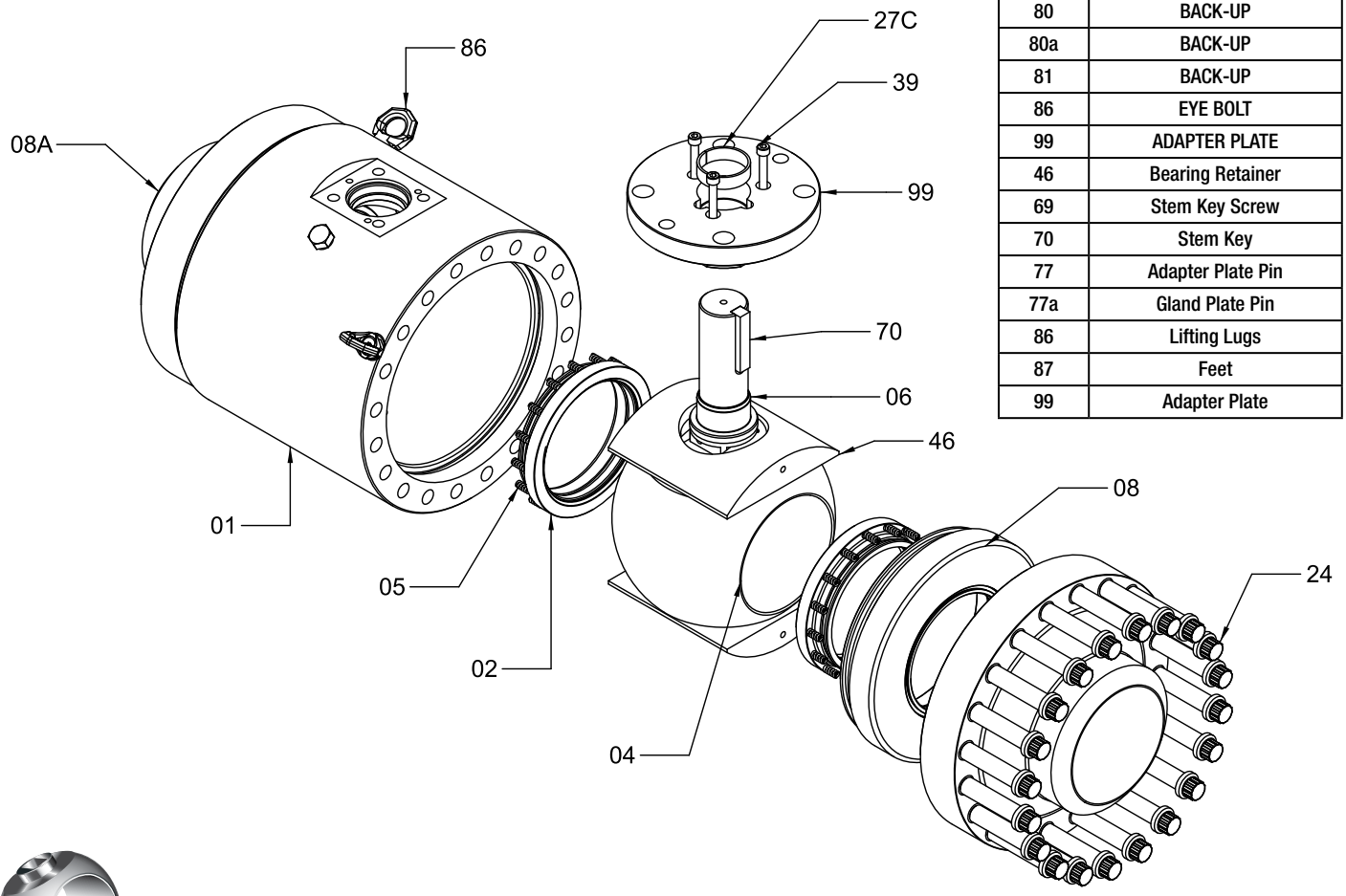
Component Parts



Part No.	Description
01	BODY
03	SEAT
04	BALL
05	SPRING
06	STEM
07	THRUST WASHER
08	THREADED CLOSURE
08a	FLANGE W.N.
09a	GASKET
09b	O-RING
16	O-RING
16a	GASKET
24	CAP-SCREW 12 POINTS
27a	BEARING
27c	BEARING
27d	BEARING
28b	THRUST WASHER
33	O-RING
33g	O-RING
34	DRAIN
35	VENT
39c	CAP-SCREW
46	BALL SUPPORT
70	KEY
77	PIN
80	BACK-UP
80a	BACK-UP
81	BACK-UP
86	EYE BOLT
99	ADAPTER PLATE
46	Bearing Retainer
69	Stem Key Screw
70	Stem Key
77	Adapter Plate Pin
77a	Gland Plate Pin
86	Lifting Lugs
87	Feet
99	Adapter Plate



Valve Material Selection

BODY, CLOSURE, FLANGE

AISI 4130 (Uncoated / Xylan Coated)
ASTM A694-F60
Duplex 22% Cr
Superduplex 25% Cr
SS 410
Inconel 625
ASTM A694-F60 + Inconel 625 overlay

TRIM (SEAT, BALL AND STEM)

AISI 4130 – 0.003" ENP
ASTM A694-F60 – 0.003" ENP
17-4 PH
Duplex 22% Cr
Superduplex 25% Cr
SS 410
Inconel 625
Inconel 718

BODY SEALS / SEAT SEALS

AISI 4130 – 0.003" ENP
ASTM A694-F60 – 0.003" ENP
17-4 PH
Duplex 22% Cr
Superduplex 25% Cr
SS 410
Inconel 625
Inconel 718

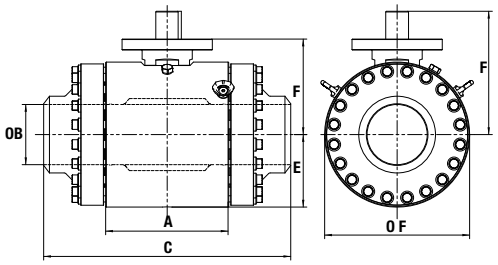
SEAT INSERT

PEEK
PCTFE / KEL-F
NYLON (DEVLON V-API)
METAL WITH TUNGSTEN CARBIDE COATING (MIN. TH. 0.2 mm)

BOLTING

ASTM A320-L7 / A193-B7 (XYLAN COATED)
ASTM A320-L7M / A193-B7M (XYLAN COATED)
ASTM A453-GR.660 (XYLAN COATED)

Dimensional Data
Class 3750 / 6250 / 10000 ps



Class 3750 psi

Size	A		B		C		D		D		F		Weight					
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lb	kg				
2	5,80	147	1,90	48	12,00	305	4,30	109	3,95	100	5,70	145	62	28				
2 1/2	6,75	171	2,20	56	13,75	349	4,75	121	4,45	113	6,15	156	93	42				
3	7,55	192	2,56	65	13,95	354	5,30	135	5,05	128	7,13	181	130	59				
4	8,35	212	3,43	87	15,75	400	6,00	152	5,75	146	7,80	198	183	83				
4	9,72	247	3,82	97	18,40	467	6,57	167	6,42	163	8,40	213	247	112				
5	10,28	261	4,06	103	19,92	506	7,28	185	7,17	182	9,30	236	313	142				
6	10,87	276	5,20	132	21,35	542	8,27	210	5,33	136	10,67	271	450	204				
8	14,10	358	7,05	179	25,75	654	9,92	252	6,63	169	13,27	337	833	378				
10	16,85	428	9,10	231	30,25	768	11,90	302	7,22	184	14,45	367	1484	673				
12	19,20	488	10,75	273	34,88	886	13,85	352	8,40	214	16,80	427	2328	1056				
14	21,10	536	11,80	300	38,43	976	15,20	386	9,27	236	18,55	471	2994	1358				

Class 6250 psi

Size	A		B		C		D		D		F		Weight					
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lb	kg				
2	5,80	147	1,50	38	12,01	305	4,29	109	3,94	100	5,71	145	66	30				
2 1/2	6,75	171	1,80	46	13,74	349	4,76	121	4,45	113	6,14	156	97	44				
3	7,55	192	2,28	58	15,20	386	5,31	135	5,04	128	7,13	181	143	65				
4	8,58	218	3,15	80	17,13	435	5,98	152	5,75	146	7,80	198	190	86				
4	9,72	247	3,62	92	18,39	467	6,57	167	6,42	163	8,39	213	254	115				
5	10,28	261	4,06	103	19,92	506	7,28	185	7,17	182	9,29	236	313	142				
6	11,85	301	4,88	124	24,13	613	8,86	225	5,91	150	11,81	300	622	282				
8	16,06	408	6,80	173	29,21	742	10,94	278	6,75	172	13,50	343	1268	575				
10	19,75	502	8,50	216	35,91	912	13,43	341	8,39	213	16,77	426	2227	1010				
10	20,80	528	9,10	231	37,32	948	14,13	359	8,84	225	17,68	449	2670	1211				
12	23,00	584	10,12	257	40,94	1040	15,35	390	9,55	243	19,09	485	3538	1605				
12	24,40	620	10,75	273	43,23	1098	16,14	410	10,04	255	20,08	510	4145	1880				

Class 10000 psi

Size	A		B		C		D		D		F		Weight					
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lb	kg				
2	5,79	147	1,50	38	12,01	305	4,29	109	3,94	100	5,71	145	66	30				
2 1/2	6,73	171	1,80	46	13,74	349	4,76	121	4,45	113	6,14	156	97	44				
3	7,56	192	2,28	58	15,20	386	5,31	135	5,04	128	7,13	181	143	65				
4	9,02	229	3,15	80	18,46	469	6,54	166	6,26	159	8,94	227	262	119				
5	11,02	280	4,06	103	21,18	538	7,76	197	7,80	198	9,96	253	419	190				
6	14,49	368	4,88	124	28,74	730	10,39	264	6,38	162	12,76	324	1093	496				
8	19,37	492	6,80	173	37,87	962	9,65	245	8,46	215	16,93	430	2560	1161				
10	23,62	600	8,50	216	45,12	1146	16,06	408	9,90	252	19,80	503	4387	1990				
12	29,13	740	10,12	257	57,09	1450	19,25	489	11,99	305	23,98	609	8053	3653				

"All the above dimensions and weights could be subjected to changes by Perar SpA without any notification, due to engineering activities. Therefore, please consult the factory for confirmation on the above data as well as for other dimensions and weights not reported in the table".


Perar
Custom
Made
... to suit your requirements!

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