			VALVE INDEX				
Valve Code	Valve Type	Valve Ends	Valve Rating	Size Range	Temp Range (°C)	Valve Body Material Grade	Page
XBV60C	BALL	BW (EN 12627)	Class 600 (EN 12516-1)	8" - 30"	-20 / +80	8E3	3
XBV60D	BALL	BW (EN 12627)	Class 600 (EN 12516-1)	2" - 6"	-20 / +80	3E1	4
XPV60C	PLUG	BW (EN 12627)	Class 600 (EN 12516-1)	8" - 12"	-20 / +80	8E3	5
XPV60D	PLUG	BW (EN 12627)	Class 600 (EN 12516-1)	2" - 6"	-20 / +80	3E1	6
XPV60F	PLUG	BW/FL (EN12627/EN1759-1)	Class 600 (EN 12516-1)	2" - 6"	-20 / +80	3E1	7
XPV60G	PLUG	SW/FL (EN 12760/EN1759-1)	Class 600 (EN 12516-1)	1/2" - 2"	-20 / +80	3E1	8
XPV60L	PLUG	BW (EN 12627)	Class 600 (EN 12516-1)	8" - 12"	-40 / +80	7E1	9
XPV60M	PLUG	BW (EN 12627)	Class 600 (EN 12516-1)	2" - 6"	-40 / +80	7E0	10
XGV60L	GATE	BW (EN 12627)	Class 600 (EN 12516-1)	8" - 12"	-40 / +80	7E1	11
XGV60M	GATE	BW (EN 12627)	Class 600 (EN 12516-1)	2" - 6"	-40 / +80	7E0	12

## FIELD IDENTIFICATION

Ends: End Connections

Installation:

BW Butt Weld
FL Flanged
SW Socket Weld
TH F Threaded Female
TH M Threaded Male
AG Aboveground

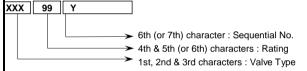
UG Underground

Other: ENP Electroless Nickel Plating

SS Stainless Steel
N/A Not Applicable
LT Low Temperature
NPT National Pipe Taper

VALVES IDENTIFICATION

Valves are identified by a combination of six (6) characters. The concept for this identification is presented herebelow:



## TABLE OF IDENTIFICATION CHARACTERS

	1st, 2nd & 3rd CHARACTERS VALVE TYPE		4th & 5th (or 6th)Cl RATING	6th (or 7th) CHARACTER VALVES DIVERSIFICATION	
XGV	:	GATE VALVE	15 :	Class 150	A : ≥8" FLANGED
XGL	:	GLOBE VALVE	30 :	Class 300	B : <8" FLANGED
XCV	:	CHECK VALVE	60 :	Class 600	C : ≥8" BW
XBV	:	BALL VALVE	90 :	Class 900	D : <8" BW
XPV	:	PLUG VALVE	150 :	Class 1500	E : ≥8" BW/FL
XBT	:	BUTTERFLY VALVE			F : <8" BW/FL
			06 :	PN6	G : <8" SW/FL
			10 :	PN10	
			16 :	PN16	L : ≥8" BW LT
					M : <8" BW LT
					P · PIPELINE BW

	Valve Code			XBV600					
	Valve Code  Valve Description			Ball Valves ≥ 8" - cl					
	vaive bescription	1		BV-xxxx	a33 000 - DVV				
Tag No.	ed ball, fire safe, anti-blow out and a	anti statio dosigni doublo block s	-						
	ed bail, life sale, anti-blow out and a	anti-static design, double block a	and bleed with dual pist	on sealing enect.					
·			T						
	VALVE SIZE RANGE		8" (DN200) ≤ NPS ≤ 30"	(DN 750)					
- 4	VALVE PRESSURE CLASS		#600						
AT	VALVE TYPE		Ball - double block and						
	VALVE END CONFIGURATION		·	Butt Weld End - Pupped)			Note 3		
GENERAL DATA	VALVE SERVICE			sporadic passage of water	er and glycol. Hydrogen blend	up to 100%.			
H H	VALVE BORE (FULL / REDUCED)	1	Full Bore				Note 8		
35	INSTALLATION		Below Ground (UG), Dir	ect Buried					
	BODY DESIGN		Fully Welded						
	FLOW		Bidirectional						
-									
	DESIGN PRESSURE (barg)		MINIMUM:	Full Vacuum	MAXIMUM:	80			
	DESIGN TEMPERATURE (°C)		MINIMUM:	-20	MAXIMUM:	+80	Note 2		
	VALVE OPERATION		Handwheel, Gear Opera	· ·			Note 7		
	VENT CONNECTION		1" Valved and plugged				Note 9		
ĺ	DRAIN CONNECTION	ANI .	1" Valved and plugged	weided to trie body			Note 9		
⋖	PRESSURE RELIEF CONNECTIO		Required				Note 5		
TAC	SEALANT INJECTION CONNECTION	UN	Required				Note 9		
Ž.	SUPPORT LEGS / FEET		Required						
DESIGN DATA	LIFTING EYES		Required						
Ä	LOCKING FACILITY		Required						
ĺ	MARKING / TAGGING		Required, as per DESF				Note 7		
ĺ	POSITION INDICATOR  IMPACT TEST TEMPERATURE		Required, as per DESF	-	ification and EN 4444		Note 7		
				erature, as per Project Sp	ecification and EN 14141		Note 7		
	SURFACE TREATMENT FIRE SAFE DESIGN		In accordance with DES As per API 6FA / EN ISO				Note 7		
	FIRE SAFE DESIGN		AS per API OFA / EN ISC	7 10497					
	BODY		Teath 18th 18th 18th 18th 18th		-05)				
	COVER/BONNET		<u> </u>	Carbon Steel P355NH (1.05 Carbon Steel P355NH (1.05	•		Note 4		
	GATE			arbon Steer F353NH (1.0	100)		Note 4		
			N/A V5C-NHM017-12-2 (SS 1 4401) or oquivalent						
	BALL		X5CrNiM017-12-2 (SS 1	.4401) or equivalent					
	DISC		N/A						
	DISC TRIM		N/A X5CrNiM017-12-2 (SS 1	.4401) or equivalent			Note 1.2		
	DISC TRIM SEALS		N/A X5CrNiM017-12-2 (SS 1 Viton / Graphite - Dual I	.4401) or equivalent			Note 1, 2		
	DISC TRIM SEALS GASKETS		N/A X5CrNiM017-12-2 (SS 1	.4401) or equivalent			Note 1, 2		
<sub>ω</sub>	DISC TRIM SEALS GASKETS STEM		N/A X5CrNiM017-12-2 (SS 1 Viton / Graphite - Dual I N/A	.4401) or equivalent Piston Seals			Note 1, 2		
	DISC TRIM SEALS GASKETS		N/A X5CrNiM017-12-2 (SS 1 Viton / Graphite - Dual I	.4401) or equivalent Piston Seals			Note 1, 2		
	DISC TRIM SEALS GASKETS STEM TRUNNION		N/A X5CrNiM017-12-2 (SS 1 Viton / Graphite - Dual I N/A	.4401) or equivalent Piston Seals			Note 1, 2		
	DISC TRIM SEALS GASKETS STEM TRUNNION SEAT/RINGS		N/A X5CrNiM017-12-2 (SS 1 Viton / Graphite - Dual I N/A X5CrNiM017-12-2 (SS 1	.4401) or equivalent Piston Seals					
	DISC TRIM SEALS GASKETS STEM TRUNNION SEAT/RINGS STEM SEAL		N/A X5CrNiM017-12-2 (SS 1 Viton / Graphite - Dual I N/A X5CrNiM017-12-2 (SS 1 Viton / 316 / Graphite	.4401) or equivalent Piston Seals					
	DISC TRIM SEALS GASKETS STEM TRUNNION SEAT/RINGS STEM SEAL		N/A X5CrNiM017-12-2 (SS 1 Viton / Graphite - Dual I N/A X5CrNiM017-12-2 (SS 1 Viton / 316 / Graphite	.4401) or equivalent Piston Seals					
MATERIALS	DISC TRIM SEALS GASKETS STEM TRUNNION SEAT/RINGS STEM SEAL		N/A X5CrNiM017-12-2 (SS 1 Viton / Graphite - Dual I N/A X5CrNiM017-12-2 (SS 1 Viton / 316 / Graphite N/A	.4401) or equivalent Piston Seals .4401) or equivalent	66-1 / PED 2014/68/EU/ ASME E	B31.12 PL Option A			
MATERIALS	DISC TRIM SEALS GASKETS STEM TRUNNION SEAT/RINGS STEM SEAL BOLTING		N/A X5CrNiM017-12-2 (SS 1 Viton / Graphite - Dual I N/A X5CrNiM017-12-2 (SS 1 Viton / 316 / Graphite N/A	.4401) or equivalent Piston Seals .4401) or equivalent	66-1 / PED 2014/68/EU/ ASME E	331.12 PL Option A			
MATERIALS	DISC TRIM SEALS GASKETS STEM TRUNNION SEAT/RINGS STEM SEAL BOLTING  DESIGN DIMENSIONS FLANGE DIMENSIONS		N/A  X5CrNiM017-12-2 (SS 1  Viton / Graphite - Dual I  N/A  X5CrNiM017-12-2 (SS 1  Viton / 316 / Graphite  N/A  EN 1594 / EN 13942 / EI  EN 13942 / EN 14141 / /  N/A	.4401) or equivalent Piston Seals .4401) or equivalent	56-1 / PED 2014/68/EU/ ASME E	331.12 PL Option A			
MATERIALS	DISC TRIM SEALS GASKETS STEM TRUNNION SEAT/RINGS STEM SEAL BOLTING  DESIGN DIMENSIONS FLANGE DIMENSIONS WELD END DIMENSIONS		N/A  X5CrNiM017-12-2 (SS 1  Viton / Graphite - Dual I  N/A  X5CrNiM017-12-2 (SS 1  Viton / 316 / Graphite  N/A  EN 1594 / EN 13942 / EI  EN 13942 / EN 14141 / /  N/A  EN 12627	.4401) or equivalent Piston Seals .4401) or equivalent	56-1 / PED 2014/68/EU/ ASME E	331.12 PL Option A			
MATERIALS	DISC TRIM SEALS GASKETS STEM TRUNNION SEAT/RINGS STEM SEAL BOLTING  DESIGN DIMENSIONS FLANGE DIMENSIONS WELD END DIMENSIONS CERTIFICATION		N/A  X5CrNiM017-12-2 (SS 1  Viton / Graphite - Dual I  N/A  X5CrNiM017-12-2 (SS 1  Viton / 316 / Graphite  N/A  EN 1594 / EN 13942 / EI  EN 13942 / EN 14141 / /  N/A  EN 12627  EN 10204 type 3.2	.4401) or equivalent Piston Seals .4401) or equivalent .4401) or equivalent	66-1 / PED 2014/68/EU/ ASME E	331.12 PL Option A			
MATERIALS	DISC TRIM SEALS GASKETS STEM TRUNNION SEAT/RINGS STEM SEAL BOLTING  DESIGN DIMENSIONS FLANGE DIMENSIONS WELD END DIMENSIONS CERTIFICATION FIRE TEST		N/A  X5CrNiM017-12-2 (SS 1  Viton / Graphite - Dual I  N/A  X5CrNiM017-12-2 (SS 1  Viton / 316 / Graphite  N/A  EN 1594 / EN 13942 / EI  EN 13942 / EN 141141 / N/A  EN 12627  EN 10204 type 3.2  EN 14141 / EN ISO 1045	.4401) or equivalent Piston Seals .4401) or equivalent .4401) or equivalent N14141 / API 6D / EN 1226	66-1 / PED 2014/68/EU/ ASME E	B31.12 PL Option A	Note 2,6		
ODES & STANDARDS MATERIALS	DISC TRIM SEALS GASKETS STEM TRUNNION SEAT/RINGS STEM SEAL BOLTING  DESIGN DIMENSIONS FLANGE DIMENSIONS WELD END DIMENSIONS CERTIFICATION		N/A  X5CrNiM017-12-2 (SS 1  Viton / Graphite - Dual I  N/A  X5CrNiM017-12-2 (SS 1  Viton / 316 / Graphite  N/A  EN 1594 / EN 13942 / EI  EN 13942 / EN 14141 / /  N/A  EN 12627  EN 10204 type 3.2	.4401) or equivalent Piston Seals .4401) or equivalent .4401) or equivalent N14141 / API 6D / EN 1226	66-1 / PED 2014/68/EU/ ASME E	331.12 PL Option A			
CODES & STANDARDS MATERIALS	DISC TRIM SEALS GASKETS STEM TRUNNION SEAT/RINGS STEM SEAL BOLTING  DESIGN DIMENSIONS FLANGE DIMENSIONS WELD END DIMENSIONS CERTIFICATION FIRE TEST		N/A  X5CrNiM017-12-2 (SS 1  Viton / Graphite - Dual I  N/A  X5CrNiM017-12-2 (SS 1  Viton / 316 / Graphite  N/A  EN 1594 / EN 13942 / EI  EN 13942 / EN 141141 / N/A  EN 12627  EN 10204 type 3.2  EN 14141 / EN ISO 1045	.4401) or equivalent Piston Seals .4401) or equivalent .4401) or equivalent N14141 / API 6D / EN 1226	66-1 / PED 2014/68/EU/ ASME E	331.12 PL Option A	Note 2,6		
CODES & STANDARDS MATERIALS	DISC TRIM SEALS GASKETS STEM TRUNNION SEAT/RINGS STEM SEAL BOLTING  DESIGN DIMENSIONS FLANGE DIMENSIONS WELD END DIMENSIONS CERTIFICATION FIRE TEST		N/A  X5CrNiM017-12-2 (SS 1  Viton / Graphite - Dual I  N/A  X5CrNiM017-12-2 (SS 1  Viton / 316 / Graphite  N/A  EN 1594 / EN 13942 / EI  EN 13942 / EN 141141 / N/A  EN 12627  EN 10204 type 3.2  EN 14141 / EN ISO 1045	.4401) or equivalent Piston Seals .4401) or equivalent .4401) or equivalent N14141 / API 6D / EN 1226	66-1 / PED 2014/68/EU/ ASME E	B31.12 PL Option A	Note 2,6		
CODES & STANDARDS MATERIALS	DISC TRIM SEALS GASKETS STEM TRUNNION SEAT/RINGS STEM SEAL BOLTING  DESIGN DIMENSIONS FLANGE DIMENSIONS WELD END DIMENSIONS CERTIFICATION FIRE TEST HYDROSTATIC TEST	alium as the test modium, shall	N/A  X5CrNiM017-12-2 (SS 1  Viton / Graphite - Dual I  N/A  X5CrNiM017-12-2 (SS 1  Viton / 316 / Graphite  N/A  EN 1594 / EN 13942 / EI  EN 13942 / EN 14141 / /  N/A  EN 12627  EN 10204 type 3.2  EN 14141 / EN ISO 1045  EN 14141	.4401) or equivalent Piston Seals .4401) or equivalent .4401) or equivalent .4401 API 6D / EN 1226			Note 2,6		
CODES & STANDARDS MATERIALS	DISC TRIM SEALS GASKETS STEM TRUNNION SEAT/RINGS STEM SEAL BOLTING  DESIGN DIMENSIONS FLANGE DIMENSIONS WELD END DIMENSIONS CERTIFICATION FIRE TEST HYDROSTATIC TEST  An additional leak test, with he	elium as the test medium, shall	N/A  X5CrNiM017-12-2 (SS 1  Viton / Graphite - Dual I  N/A  X5CrNiM017-12-2 (SS 1  Viton / 316 / Graphite  N/A  EN 1594 / EN 13942 / EI  EN 13942 / EN 14141 / /  N/A  EN 12627  EN 10204 type 3.2  EN 14141 / EN ISO 1045  EN 14141	.4401) or equivalent Piston Seals .4401) or equivalent .4401) or equivalent .4401 API 6D / EN 1226			Note 2,6		
CODES & STANDARDS  MATERIALS	DISC TRIM SEALS GASKETS STEM TRUNNION SEAT/RINGS STEM SEAL BOLTING  DESIGN DIMENSIONS FLANGE DIMENSIONS WELD END DIMENSIONS CERTIFICATION FIRE TEST HYDROSTATIC TEST  An additional leak test, with hishall be as per Table H.1.		N/A  X5CrNiM017-12-2 (SS 1 Viton / Graphite - Dual I N/A  X5CrNiM017-12-2 (SS 1  Viton / 316 / Graphite N/A  EN 1594 / EN 13942 / EI EN 13942 / EN 14141 / / N/A  EN 12627 EN 10204 type 3.2 EN 14141 / EN 15O 1045 EN 14141 be carried out after the	.4401) or equivalent Piston Seals  .4401) or equivalent  N14141 / API 6D / EN 1226 API 6D  7	nes rated pressure as API 6D	Annex H, para. H4.	Note 2,6		
CODES & STANDARDS MATERIALS	DISC TRIM SEALS GASKETS STEM TRUNNION SEAT/RINGS STEM SEAL BOLTING  DESIGN DIMENSIONS FLANGE DIMENSIONS WELD END DIMENSIONS GERTIFICATION FIRE TEST HYDROSTATIC TEST  An additional leak test, with hishall be as per Table H.1. Seals to be suitable for 80°C. Stem seals shall be fugitive er	Stem to be anti blowout. Seals mission tested in accordance wi	N/A  X5CrNiM017-12-2 (SS 1  Viton / Graphite - Dual I  N/A  X5CrNiM017-12-2 (SS 1  Viton / 316 / Graphite  N/A  EN 1594 / EN 13942 / EI  EN 13942 / EN 14141 / /  N/A  EN 12627  EN 10204 type 3.2  EN 14141 / EN ISO 1045  EN	.4401) or equivalent Piston Seals  .4401) or equivalent  .4401) or equivalent  N14141 / API 6D / EN 1226  API 6D  Phydraulic test at 1.1 tin ble or 100% of H2, as p	nes rated pressure as API 6D er Manufacturers recommen	Annex H, para. H4.	Note 2,6  Note 1  The test duration		
CODES & STANDARDS  WATERIALS	DISC TRIM SEALS GASKETS STEM TRUNNION SEATRINGS STEM SEAL BOLTING  DESIGN DIMENSIONS FLANGE DIMENSIONS WELD END DIMENSIONS CERTIFICATION FIRE TEST HYDROSTATIC TEST  An additional leak test, with hishall be as per Table H.1. Seals to be suitable for 80°C.	Stem to be anti blowout. Seals mission tested in accordance wi	N/A  X5CrNiM017-12-2 (SS 1  Viton / Graphite - Dual I  N/A  X5CrNiM017-12-2 (SS 1  Viton / 316 / Graphite  N/A  EN 1594 / EN 13942 / EI  EN 13942 / EN 14141 / /  N/A  EN 12627  EN 10204 type 3.2  EN 14141 / EN ISO 1045  EN	.4401) or equivalent Piston Seals  .4401) or equivalent  .4401) or equivalent  N14141 / API 6D / EN 1226  API 6D  Phydraulic test at 1.1 tin ble or 100% of H2, as p	nes rated pressure as API 6D er Manufacturers recommen	Annex H, para. H4.	Note 2,6  Note 1  The test duration		
CODES & STANDARDS  WATERIALS  1.	DISC TRIM SEALS GASKETS STEM TRUNNION SEAT/RINGS STEM SEAL BOLTING  DESIGN DIMENSIONS FLANGE DIMENSIONS WELD END DIMENSIONS CERTIFICATION FIRE TEST HYDROSTATIC TEST  An additional leak test, with hishall be as per Table H.1. Seals to be suitable for 80°C. Stem seals shall be fugitive er fugitive erringitive erringiti	Stem to be anti blowout. Seals mission tested in accordance wi ss shall be BH Minimum pup length 500 mm, to	N/A  X5CrNiM017-12-2 (SS 1 Viton / Graphite - Dual I  N/A  X5CrNiM017-12-2 (SS 1  Viton / 316 / Graphite  N/A  EN 1594 / EN 13942 / EI  EN 13942 / EN 14141 / /  N/A  EN 12627  EN 12627  EN 12024 type 3.2  EN 14141 / EN ISO 1045  EN 14141 / EN ISO	A401) or equivalent Piston Seals  4401) or equivalent  N14141 / API 6D / EN 1226  API 6D  Pulydraulic test at 1.1 tir ble or 100% of H2, as phall be carried out at boor. Pup material, wall the	nes rated pressure as API 6D er Manufacturers recommen th ambient and maximum de ickess and internal / externa	Annex H, para. H4. dations. ssign pressure with	Note 2,6  Note 1  The test duration helium as fluid. The test as for the		
CODES & STANDARDS  WATERIALS  1.	DISC TRIM SEALS GASKETS STEM TRUNNION SEATRINGS STEM SEAL BOLTING  DESIGN DIMENSIONS FLANGE DIMENSIONS WELD END DIMENSIONS CERTIFICATION FIRE TEST HYDROSTATIC TEST  An additional leak test, with hishall be as per Table H.1. Seals to be suitable for 80°C. Stem seals shall be fugitive er fugitive emission tightness cla Butt weld end to be pupped. I abutting pipe, as per DSF-110	Stem to be anti blowout. Seals mission tested in accordance wi sss shall be BH Minimum pup length 500 mm, to 15301-1663-SPC-PLN-101 - Pipi	N/A  X5CrNiM017-12-2 (SS 1 Viton / Graphite - Dual I  N/A  X5CrNiM017-12-2 (SS 1  Viton / 316 / Graphite  N/A  EN 1594 / EN 13942 / EI  EN 13942 / EN 14141 / /  N/A  EN 12627  EN 12627  EN 12024 type 3.2  EN 14141 / EN ISO 1045  EN 14141 / EN ISO	A401) or equivalent Piston Seals  4401) or equivalent  N14141 / API 6D / EN 1226  API 6D  Pulydraulic test at 1.1 tir ble or 100% of H2, as phall be carried out at boor. Pup material, wall the	nes rated pressure as API 6D er Manufacturers recommen th ambient and maximum de ickess and internal / externa	Annex H, para. H4. dations. ssign pressure with	Note 2,6  Note 1  The test duration helium as fluid. The test as for the		
CODES & STANDARDS  WATERIALS  3.	DISC TRIM SEALS GASKETS STEM TRUNNION SEAT/RINGS STEM SEAL BOLTING  DESIGN DIMENSIONS FLANGE DIMENSIONS WELD END DIMENSIONS CERTIFICATION FIRE TEST HYDROSTATIC TEST  An additional leak test, with hishall be as per Table H.1. Seals to be suitable for 80°C. Stem seals shall be fugitive er fugitive emission tightness cla Butt weld end to be pupped. It abutting pipe, as per DSF-11C material properties and wall the	Stem to be anti blowout. Seals mission tested in accordance wi sss shall be BH Minimum pup length 500 mm, to 15301-1663-SPC-PLN-101 - Pipi nickness.	N/A  X5CrNiM017-12-2 (SS 1 Viton / Graphite - Dual I  N/A  X5CrNiM017-12-2 (SS 1  Viton / 316 / Graphite  N/A  EN 1594 / EN 13942 / EI  EN 13942 / EN 14141 / /  N/A  EN 12627  EN 12627  EN 12024 type 3.2  EN 14141 / EN ISO 1045  EN 14141 / EN ISO	A401) or equivalent Piston Seals  4401) or equivalent  N14141 / API 6D / EN 1226  API 6D  Pulydraulic test at 1.1 tir ble or 100% of H2, as phall be carried out at boor. Pup material, wall the	nes rated pressure as API 6D er Manufacturers recommen th ambient and maximum de ickess and internal / externa	Annex H, para. H4. dations. ssign pressure with	Note 2,6  Note 1  The test duration helium as fluid. The test as for the		
CODES & STANDARDS  WATERIALS  7	DISC TRIM SEALS GASKETS STEM TRUNNION SEAT/RINGS STEM SEAL BOLTING  DESIGN DIMENSIONS FLANGE DIMENSIONS WELD END DIMENSIONS CERTIFICATION FIRE TEST HYDROSTATIC TEST  An additional leak test, with hishall be as per Table H.1. Seals to be suitable for 80°C. Stem seals shall be fugitive er fugitive emission tightness cla But weld end to be pupped. I abutting pipe, as per DSF-11C material properties and wall the Materials per EN 14141 / EN 1	Stem to be anti blowout. Seals mission tested in accordance wi sss shall be BH Minimum pup length 500 mm, to 15301-1663-SPC-PLN-101 - Pipi nickness.	N/A  X5CrNiM017-12-2 (SS 1  Viton / Graphite - Dual I  N/A  X5CrNiM017-12-2 (SS 1  Viton / 316 / Graphite  N/A  Viton / 316 / Graphite  N/A  EN 1594 / EN 13942 / EI  EN 13942 / EN 14141 / /  N/A  EN 10204 type 3.2  EN 10204 type 3.2  EN 14141 / EN ISO 1045  EN 14141  be carried out after the smaterial shall be suitath ISO 15848-2. Test since the confirmed by vending Classes Specification	A401) or equivalent Piston Seals  A401) or equivalent  N14141 / API 6D / EN 1226  API 6D  Phydraulic test at 1.1 tirk ble or 100% of H2, as phall be carried out at boor. Pup material, wall the on. Pup material shall co	nes rated pressure as API 6D er Manufacturers recommen th ambient and maximum de iickess and internal / externa omply with ASME B31.12, Pa	Annex H, para. H4. dations. ssign pressure with al coating shall be s art PL option A requ	Note 2,6  Note 1  The test duration helium as fluid. The tame as for tame		
CODES & STANDARDS  WATERIALS  1.  2.  3.	DISC TRIM SEALS GASKETS STEM TRUNNION SEAT/RINGS STEM SEAL BOLTING  DESIGN DIMENSIONS FLANGE DIMENSIONS WELD END DIMENSIONS GERTIFICATION FIRE TEST HYDROSTATIC TEST  An additional leak test, with hishall be as per Table H.1. Seals to be suitable for 80°C. Stem seals shall be fugitive er fugitive emission tightness cla Butt weld end to be pupped. I abutting pipe, as per DSF-110 material properties and wall th Materials per EN 14141 / EN 1 Pressure relief connection sha	Stem to be anti blowout. Seals mission tested in accordance wi sas shall be BH Minimum pup length 500 mm, to 15301-1663-SPC-PLN-101 - Pipi nickness. 12516.	N/A X5CrNiM017-12-2 (SS 1 Viton / Graphite - Dual I N/A X5CrNiM017-12-2 (SS 1 Viton / 316 / Graphite N/A  Viton / 316 / Graphite N/A  EN 1594 / EN 13942 / EI EN 13942 / EN 14141 / / N/A EN 12627 EN 10204 type 3.2 EN 14141 / EN ISO 1045 EN 14141 be carried out after the material shall be suita th ISO 15848-2. Test si to be confirmed by vending Classes Specification to the valve operator ar	A401) or equivalent Piston Seals  4401) or equivalent  N14141 / API 6D / EN 1226  API 6D  Piston Seals  N14141 / API 6D / EN 1226  API 6D  Piston Seals  Pis	nes rated pressure as API 6D er Manufacturers recommen th ambient and maximum de iickess and internal / externa omply with ASME B31.12, Pa	Annex H, para. H4. dations. ssign pressure with al coating shall be s art PL option A requ	Note 2,6  Note 1  The test duration helium as fluid. The tame as for tame		
CODES & STANDARDS  WATERIALS  3.	DISC TRIM SEALS GASKETS STEM TRUNNION SEAT/RINGS STEM SEAL BOLTING  DESIGN DIMENSIONS FLANGE DIMENSIONS WELD END DIMENSIONS GERTIFICATION FIRE TEST HYDROSTATIC TEST  An additional leak test, with hishall be as per Table H.1. Seals to be suitable for 80°C. Stem seals shall be fugitive er fugitive emission tightness cla Butt weld end to be pupped. I abutting pipe, as per DSF-110 material properties and wall th Materials per EN 14141 / EN 1 Pressure relief connection sha	Stem to be anti blowout. Seals mission tested in accordance wi sss shall be BH Minimum pup length 500 mm, to 15301-1663-SPC-PLN-101 - Pipi nickness.	N/A X5CrNiM017-12-2 (SS 1 Viton / Graphite - Dual I N/A X5CrNiM017-12-2 (SS 1 Viton / 316 / Graphite N/A  Viton / 316 / Graphite N/A  EN 1594 / EN 13942 / EI EN 13942 / EN 14141 / / N/A EN 12627 EN 10204 type 3.2 EN 14141 / EN ISO 1045 EN 14141 be carried out after the material shall be suita th ISO 15848-2. Test si to be confirmed by vending Classes Specification to the valve operator ar	A401) or equivalent Piston Seals  4401) or equivalent  N14141 / API 6D / EN 1226  API 6D  Piston Seals  N14141 / API 6D / EN 1226  API 6D  Piston Seals  Pis	nes rated pressure as API 6D er Manufacturers recommen th ambient and maximum de iickess and internal / externa omply with ASME B31.12, Pa	Annex H, para. H4. dations. ssign pressure with al coating shall be s art PL option A requ	Note 2,6  Note 1  The test duration helium as fluid. The tame as for tame		
CODES & STANDARDS  1. 2. 3. 4. 5.	DISC TRIM SEALS GASKETS STEM TRUNNION SEAT/RINGS STEM SEAL BOLTING  DESIGN DIMENSIONS FLANGE DIMENSIONS WELD END DIMENSIONS CERTIFICATION FIRE TEST HYDROSTATIC TEST  An additional leak test, with hishall be as per Table H.1. Seals to be suitable for 80°C. Stem seals shall be fugitive er fugitive emission tightness cla Butt weld end to be pupped. It abutting pipe, as per DSF-110 material properties and wall the Materials per EN 14141 / EN 1 Pressure relief connection shadirectly to the ball valve body Stem extension length as per	Stem to be anti blowout. Seals mission tested in accordance wi ss shall be BH  Minimum pup length 500 mm, to 15301-1663-SPC-PLN-101 - Pipi iickness. 12516.  all be extended to a level close to and fitted with a threaded solic relevant MTO. Stem extension in the seal of	N/A  X5CrNiM017-12-2 (SS 1 Viton / Graphite - Dual I  N/A  X5CrNiM017-12-2 (SS 1  Viton / 316 / Graphite  N/A  EN 1594 / EN 13942 / EI  EN 13942 / EN 14141 / /  N/A  EN 12627  EN 10204 type 3.2  EN 14141 / EN ISO 1045  EN 14141  be carried out after the smaterial shall be suita th ISO 15848-2. Test si to be confirmed by vending Classes Specification to the valve operator and hexagonal head plug housing shall be rigidly	A401) or equivalent Piston Seals  4401) or equivalent  4401) or equivalent  N14141 / API 6D / EN 1226  API 6D  7  Phydraulic test at 1.1 tir ble or 100% of H2, as pall be carried out at boor. Pup material, wall thon. Pup material shall cold shall be valved with pomounted to valve body	nes rated pressure as API 6D er Manufacturers recommend th ambient and maximum de lickess and internal / externa omply with ASME B31.12, Pa lug valve class 1500 with me	Annex H, para. H4. dations. ssign pressure with al coating shall be s art PL option A requ	Note 2,6  Note 1  The test duration helium as fluid. The tame as for tame as for the tame as for tame as for the tame as for tame as f		
NOTES 1. 2. 3. 4. 5.	DISC TRIM SEALS GASKETS STEM TRUNNION SEAT/RINGS STEM SEAL BOLTING  DESIGN DIMENSIONS FLANGE DIMENSIONS WELD END DIMENSIONS CERTIFICATION FIRE TEST HYDROSTATIC TEST  An additional leak test, with high least per Table H.1. Seals to be suitable for 80°C. Stem seals shall be fugitive er fugitive emission tightness clae Butt weld end to be pupped. It material properties and wall the Materials per EN 14141 / EN 1 Pressure relief connection shad directely to the ball valve body. Stem extension length as per The stem extension casing sh	Stem to be anti blowout. Seals mission tested in accordance wi sss shall be BH  Minimum pup length 500 mm, to 105301-1663-SPC-PLN-101 - Pipi nickness. 12516.  all be extended to a level close to a fitted with a threaded solic relevant MTO. Stem extension I all be equipped with a device to	N/A  X5CrNiM017-12-2 (SS 1 Viton / Graphite - Dual I N/A  X5CrNiM017-12-2 (SS 1  Viton / 316 / Graphite N/A  X5CrNiM017-12-2 (SS 1  Viton / 316 / Graphite N/A  EN 1594 / EN 13942 / EI EN 13942 / EN 14141 / / N/A  EN 12627 EN 10204 type 3.2 EN 14141 / EN ISO 1045 EN 14141 / EN ISO 1045 EN 14141  be carried out after the s material shall be suita th ISO 15848-2. Test si to be confirmed by vend ing Classes Specification to the valve operator ar d hexagonal head plug housing shall be rigidly release pressure in ce	A401) or equivalent Piston Seals  A401) or equivalent  A14141 / API 6D / EN 1226  API 6D  Phydraulic test at 1.1 tire ble or 100% of H2, as phall be carried out at boor. Pup material, wall then. Pup material shall or  d shall be valved with phenounted to valve body use of leakage from the state of the s	nes rated pressure as API 6D er Manufacturers recommen- th ambient and maximum de iickess and internal / externa mply with ASME B31.12, Pa lug valve class 1500 with me stern sealing system.	Annex H, para. H4. dations. ssign pressure with al coating shall be s art PL option A requ	Note 2,6  Note 1  The test duration helium as fluid. The tame as for tame as for the tame as for tame as for the tame as for tame as f		
CODES & STANDARDS  1. 2. 3. 4. 5. 6.	DISC TRIM SEALS GASKETS STEM TRUNNION SEAT/RINGS STEM SEAL BOLTING  DESIGN DIMENSIONS FLANGE DIMENSIONS WELD END DIMENSIONS CERTIFICATION FIRE TEST HYDROSTATIC TEST  An additional leak test, with hishall be as per Table H.1. Seals to be suitable for 80°C. Stem seals shall be fugitive erfugitive errission tightness cla Butt weld end to be pupped. I abutting pipe, as per DSF-11C material properties and wall the Materials per EN 14141 / EN 1 Pressure relief connection shadirectely to the ball valve body. Stem extension length as per The stem extension casing shadirectely to the ball valve body. Stem extension length as per The stem extension casing shadirectely to the ball valve body.	Stem to be anti blowout. Seals mission tested in accordance wi sss shall be BH  Minimum pup length 500 mm, to 05301-1663-SPC-PLN-101 - Pipi nickness. 12516.  all be extended to a level close to an accordance with a threaded solid relevant MTO. Stem extension I all be equipped with a device to sfa Specifications for Ball Valves	N/A  X5CrNiM017-12-2 (SS 1 Viton / Graphite - Dual I N/A  X5CrNiM017-12-2 (SS 1  Viton / 316 / Graphite N/A  X5CrNiM017-12-2 (SS 1  Viton / 316 / Graphite N/A  EN 1594 / EN 13942 / EI EN 13942 / EN 14141 / / N/A  EN 12627 EN 10204 type 3.2 EN 14141 / EN ISO 1045 EN 14141 / EN ISO 1045 EN 14141  be carried out after the s material shall be suita th ISO 15848-2. Test si to be confirmed by vend ing Classes Specification to the valve operator ar d hexagonal head plug housing shall be rigidly release pressure in ce	A401) or equivalent Piston Seals  A401) or equivalent  A14141 / API 6D / EN 1226  API 6D  Phydraulic test at 1.1 tire ble or 100% of H2, as phall be carried out at boor. Pup material, wall then. Pup material shall or  d shall be valved with phenounted to valve body use of leakage from the state of the s	nes rated pressure as API 6D er Manufacturers recommen- th ambient and maximum de iickess and internal / externa mply with ASME B31.12, Pa lug valve class 1500 with me stern sealing system.	Annex H, para. H4. dations. ssign pressure with al coating shall be s art PL option A requ	Note 2,6  Note 1  The test duration helium as fluid. The tame as for tame as for the tame as for tame as for the tame as for tame as f		
NOTES 1. 2. 3. 4. 5.	DISC TRIM SEALS GASKETS STEM TRUNNION SEAT/RINGS STEM SEAL BOLTING  DESIGN DIMENSIONS FLANGE DIMENSIONS WELD END DIMENSIONS CERTIFICATION FIRE TEST HYDROSTATIC TEST  An additional leak test, with high least per Table H.1. Seals to be suitable for 80°C. Stem seals shall be fugitive er fugitive emission tightness clae Butt weld end to be pupped. It material properties and wall the Materials per EN 14141 / EN 1 Pressure relief connection shad directely to the ball valve body. Stem extension length as per The stem extension casing sh	Stem to be anti blowout. Seals mission tested in accordance wi sss shall be BH  Minimum pup length 500 mm, to 15301-1663-SPC-PLN-101 - Pipi nickness. 12516.  All be extended to a level close to a new threaded solic relevant MTO. Stem extension I all be equipped with a device to sfa Specifications for Ball Valves EN 13942 table 1.	N/A  X5CrNiM017-12-2 (SS 1 Viton / Graphite - Dual I N/A  X5CrNiM017-12-2 (SS 1  Viton / 316 / Graphite N/A  X5CrNiM017-12-2 (SS 1  Viton / 316 / Graphite N/A  EN 1594 / EN 13942 / EI EN 13942 / EN 14141 / / N/A  EN 12627 EN 10204 type 3.2 EN 14141 / EN ISO 1045 EN 14141 / EN ISO 1045 EN 14141  be carried out after the s material shall be suita th ISO 15848-2. Test si to be confirmed by vend ing Classes Specification to the valve operator ar d hexagonal head plug housing shall be rigidly release pressure in ce	A401) or equivalent Piston Seals  A401) or equivalent  A14141 / API 6D / EN 1226  API 6D  Phydraulic test at 1.1 tire ble or 100% of H2, as phall be carried out at boor. Pup material, wall then. Pup material shall or  d shall be valved with phenounted to valve body use of leakage from the state of the s	nes rated pressure as API 6D er Manufacturers recommen- th ambient and maximum de iickess and internal / externa mply with ASME B31.12, Pa lug valve class 1500 with me stern sealing system.	Annex H, para. H4. dations. ssign pressure with al coating shall be s art PL option A requ	Note 2,6  Note 1  The test duration helium as fluid. The tame as for the tame		

	V-1 - 0 - 1			VEVICE					
1	Valve Code			XBV60E					
2	Valve Description			all Valves < 8" - cl	ass 600 - BW				
3 Tag No.				V-xxxx					
4 Trunnion mounte	ed ball, fire safe, anti-blow out and anti-static o	design, double block and bi	pleed with dual pisto	n sealing effect.					
5									
6	VALVE SIZE RANGE	2" (0	DN50) ≤ NPS < 8" (DN	200)					
7	VALVE PRESSURE CLASS	#600	0						
8 🗦	VALVE TYPE	Ball	- double block and b	leed.					
9 👌	VALVE END CONFIGURATION	Butt	t Weld / Butt Weld (B	ıtt Weld End - Pupped)			Note 3		
o	VALVE SERVICE	Swe	Sweet Natural Gas with sporadic passage of water and glycol. Hydrogen blend up to 100%.						
1 単	VALVE BORE (FULL / REDUCED)	Full	Full Bore No						
C L 0 6 8 GENERAL DATA	INSTALLATION	Belo	ow Ground (UG), Dire	t Buried					
3	BODY DESIGN	Fully	y Welded						
4	FLOW	Bidir	irectional						
5									
6	DESIGN PRESSURE (barg)		MINIMUM:	Full Vacuum	MAXIMUM:	80			
7	DESIGN TEMPERATURE (°C)		MINIMUM: -20 MAXIMUM: +80 Note						
8	VALVE OPERATION	Hand	dweel or lever / Hand	wheel and Gear Box for	valves ≥ 6"		Note 7		
9	VENT CONNECTION		gged according to ma				Note 9		
0	DRAIN CONNECTION		gged according to ma	nufacture standard.			Note 9		
1 ∢	PRESSURE RELIEF CONNECTION	Requ	quired				Note 5		
2 <b>\{</b>	SEALANT INJECTION CONNECTION	Requ	<sub>l</sub> uired				Note 9		
2 2 4 5 DESIGN DATA	SUPPORT LEGS / FEET	N/A							
4 <u>5</u>	LIFTING EYES		uired for valves ≥ 6"						
5 <b>8</b>	LOCKING FACILITY	Requ	uired for valves ≥ 4"						
6	MARKING / TAGGING		juired, as per DESFA				Note 7		
7	POSITION INDICATOR		uired, as per DESFA				Note 7		
8	IMPACT TEST TEMPERATURE	Mini	imum Design Temper	ature, as per Project Sp	ecification and EN 14141		Note 7		
9	SURFACE TREATMENT		ccordance with DESF	•			Note 7		
0	FIRE SAFE DESIGN	As p	per API 6FA / EN ISO	10497					
1									
2									
3	BODY		Fully Killed Fine Grain Carbon Steel P280GH (1.0426 ) Note						
4	COVER/BONNET		Fully Killed Fine Grain Carbon Steel P280GH (1.0426 ) Note 4						
5	GATE		N/A VEC-NUMBER 1.2.2 (SS 1.4401) or or univelent						
6	BALL		X5CrNiM017-12-2 (SS 1.4401) or equivalent						
<sup>7</sup>	DISC TRIM		N/A VECNEMO17 12 2 (SS 1 4401) or controlled						
MATERIALS	SEALS		X5CrNiM017-12-2 (SS 1.4401) or equivalent						
9 <b>E</b>	GASKETS		Viton / Graphite - Dual Piston Seals						
0 IAI	STEM	N/A	NA						
1 <b>≥</b>	TRUNNION	¥5C	CrNiM017-12-2 (SS 1.4	401) or equivalent					
3	SEAT/RINGS	,,,,,		io i / oi oquiruloiii					
4	STEM SEAL	Vitor	n / 316 / Graphite				Note 2,6		
5	BOLTING	N/A							
6									
7									
8 <b>9</b>	DESIGN	EN 1	EN 1594 / EN 13942 / EN 14141 / API 6D / EN 12266-1 / PED 2014/68/EU/ ASME B31.12 PL Option A						
CODES & STANDARDS	DIMENSIONS	EN 1	13942 / EN 14141 / AF	1 6D					
o <b>Q</b>	FLANGE DIMENSIONS	N/A			<u> </u>				
1 ¥	WELD END DIMENSIONS		12627						
2 <b>ග</b> න්	CERTIFICATION		10204 type 3.1						
3 <b></b>	FIRE TEST		14141 / EN ISO 10497						
9	HYDROSTATIC TEST	EN 1	14141				Note 1		
6 NOTES									
7 NOTES	An additional leak test, with helium as th	ne test medium, shall be ca	arried out after the	nydraulic test at 1 1 tin	nes rated pressure as ADI ED An	nev H nara HA The	a test duration		
1.	shall be as per Table H.1.	ic test incurum, snan de ta	arried out after the	ryaraunc test at 1.1 till	ies rateu pressure as AFT OD ATT	nex 11, para. 114. IIII	. test duration		
	Seals to be suitable for 80°C. Stem to b	e anti blowout. Seals mate	erial shall be suitab	e or 100% of H2, as pe	er Manufacturers recommendati	ions.			
2.	Stem seals shall be fugitive emission tes	sted in accordance with ISO					ium as fluid. The		
9	, ,	fugitive emission tightness class shall be BH							
	Butt weld end to be pupped. Minimum p								
3.	abutting pipe, as per DSF-1105301-1663 material properties and wall thickness.	3-SPC-PLN-101 - Piping Cl	Jasses Specification	. Pup material shall co	omply with ASME B31.12, Part F	L option A require	ments regarding		
1 4.	Materials per EN 14141 / EN 12516.								
4.	·								
5.	Pressure relief connection shall be exter directely to the ball valve body and fitted			snall be valved with p	lug valve class 1500 with metal	lic sealing mounted	by welding		
2									
6.	Stem extension length as per relevant M				etem spaling system				
3 4 7.	The stem extension casing shall be equi  This Data Sheet relates to Desfa Specific	• •	<u> </u>	•	* *				
4 7. 5 8.	Bore diameter shall be as per EN 13942		DOI -OF U-FIF-U20	unu manuar varve U	JOIGEORG DOI -OF U-FIF-U3/ .				
6 9.	The connection shall extend to surface/g								
- <u> </u>									

	Value Carla			VPVco	•				
1	Valve Code			XPV600					
	Valve Description			lug Valves ≥ 8" - c PV-xxxx	IASS 600 - DVV				
3 Tag No.	 ressure balanced, lubricated taper plu	a with anti-friction coating fi		F V-AAAA					
	ressure balanceu, lubricateu taper pru	g with anti-metion coating, in	re sale design.						
5	VALVE SIZE RANGE		8" (DN200) ≤ NPS ≤ 12"	(DN 200)					
6	VALVE PRESSURE CLASS		#600	(DN 300)					
′ _ <	VALVE TYPE			I Pland Vanturi nattorn					
8 8	VALVE END CONFIGURATION			Bleed - Venturi pattern.  Butt Weld End - Pupped)			Note 2		
9 7	VALVE SERVICE				er and glycol. Hydrogen blend up t	to 100%	Note 3		
GENERAL DATA	VALVE BORE (FULL / REDUCED)		N/A	sporadic passage of water	er and giyeer riyaregen blend up t	10076.			
12 2	INSTALLATION		Below Ground (UG), Dire	ect Buried					
13	BODY DESIGN		Fully Welded						
14	FLOW		Bidirectional						
15									
16	DESIGN PRESSURE (barg)		MINIMUM:	Full Vacuum	MAXIMUM:	80			
17	DESIGN TEMPERATURE (°C)		MINIMUM:	-20 mm	AXIMU mm	+80	Note 2		
18	VALVE OPERATION		Handwheel, Gear Opera	tor Required			Note 7		
19	VENT CONNECTION		N/A						
20	DRAIN CONNECTION		N/A						
21 	PRESSURE RELIEF CONNECTION		N/A						
22 <b>F</b>	SEALANT INJECTION CONNECTION SUPPORT LEGS / FEET		Required						
22 23 24 25 25 26 27 27 27 27 27 27 27 27 27 27 27 27 27	LIFTING EYES		Required						
24 <b>9</b>	LOCKING FACILITY		Required Required						
25	MARKING / TAGGING		Required, as per DESFA	Specification			Note 7		
26 27	POSITION INDICATOR		Required, as per DESFA	-			Note 7		
28	IMPACT TEST TEMPERATURE			•	ecification and EN 14141		Note 7		
	SURFACE TREATMENT		In accordance with DES				Note 7		
29 30	FIRE SAFE DESIGN		As per API 6FA / EN ISO						
31									
32	•								
33	BODY		Fully Killed Fine Grain Carbon Steel P355NH (1.0565)  Note 4						
34	COVER/BONNET		Fully Killed Fine Grain C	arbon Steel P355NH (1.0	565)		Note 4		
35	GATE		N/A						
36	BALL		N/A						
37 <b>(</b> 0	PLUG		X5CrNiM017-12-2 (SS 1.4401) or equivalent						
38 39 40 40 41	TRIM SEALS		N/A	Manufacturanta confirm	(advisa far associa				
39	GASKETS		N/A	Manufacturer to confirm	duvise for service		Note 1, 2		
40 41 <b>E W</b>	STEM		X5CrNiM017-12-2 (SS 1.	4401) or equivalent					
42	TRUNNION		N/A	1101) or oquivalent					
43	SEAT/RINGS		N/A						
44	STEM SEAL		Viton / 316 / Graphite				Note 2,6		
45	BOLTING		N/A						
46									
47	DESIGN		EN 4504 / EN 40040 / E	144444 / ADICO / EN 4000	CC 4 / DED 2044/CO/ELV 4044E 551	12 DL Castar A			
48 <b>9</b> 0	DESIGN DIMENSIONS		EN 1594 / EN 13942 / EN EN 13942 / EN 14141 / A		66-1 / PED 2014/68/EU/ ASME B31.	12 PL Option A			
<b>-</b> -○ •	FLANGE DIMENSIONS		N/A						
50 QAY	WELD END DIMENSIONS		EN 12627						
52 <b>%</b>	CERTIFICATION		EN 10204 type 3.2						
53 <b>🖁</b>	FIRE TEST		EN 14141 / EN ISO 1049	7	<del></del>	· · · · · · · · · · · · · · · · · · ·	·		
54	HYDROSTATIC TEST		EN 14141				Note 1		
-									
56 NOTES									
57 NOTES	An additional leak test, with heliu	m as the test medium, shall	be carried out after the	hydraulic test at 1.1 tir	nes rated pressure as API 6D Ani	nex H, para. H4. Th	ne test duration		
58 1.	shall be as per Table H.1.	·			· 				
	Seals to be suitable for 80°C. Ste								
2.	Stem seals shall be fugitive emiss fugitive emission tightness class s		th ISO 15848-2. Test sh	all be carried out at bo	th ambient and maximum design	n pressure with he	elium as fluid. The		
59			he confirmed by you	or Pun material wall th	nickess and internal / external or	nating shall be con	ne as for the		
3.	Butt weld end to be pupped. Minimum pup length 500 mm, to be confirmed by vendor. Pup material, wall thickess and internal / external coating shall be same as for the abutting pipe, as per DSF-1105301-1663-SPC-PLN-101 - Piping Classes Specification. Pup material shall comply with ASME B31.12, Part PL option A requirements regarding								
60	material properties and wall thick	ness.							
61 4.	Materials per EN 14141 / EN 1251	16.			-	-	-		
62 5.	N/A	NTO O	h						
6.	Stem extension length as per rele The stem extension casing shall be								
64 7.	This Data Sheet relates to Desfa								
65									
				_		_			

	Vil. O. I.			VEVOCE					
	Valve Code		D	XPV60E					
	/alve Description			ug Valves < 8" - cl	ass 600 - BW				
3 Tag No.	   essure balanced, lubricated taper plug with	a anti friction coating f		F V-XXXX					
	essure baranced, lubricated taper plug with	ranu-medon coading, n	ire sare design.						
5	· · · · · · · · · · · · · · · · · · ·		1						
6	VALVE SIZE RANGE		2" (DN50) ≤ NPS < 8" (D	N 200)					
7 <	VALVE PRESSURE CLASS		#600						
8 <b>PA</b>	VALVE TYPE		Plug - Double Block and						
9 1	VALVE END CONFIGURATION			Butt Weld End - Pupped)			Note 3		
GENERAL DATA	VALVE SERVICE		Sweet Natural Gas with sporadic passage of water and glycol. Hydrogen blend up to 100%.						
11 🖁	VALVE BORE (FULL / REDUCED)		N/A	and Description					
	INSTALLATION BODY DESIGN		Below Ground (UG), Dire Fully Welded	ect Buried					
13 14	FLOW		Bidirectional						
15	12011		Biancetionar						
16	DESIGN PRESSURE (barg)		MINIMUM:	Full Vacuum	MAXIMUM:	80			
17	DESIGN TEMPERATURE (°C)		MINIMUM: -20 MAXIMUM: +80 Note 2						
18	VALVE OPERATION		Handweel or lever / Han	l dwheel and Gear Box for	valves ≥ 6"		Note 7		
19	VENT CONNECTION		N/A						
20	DRAIN CONNECTION		N/A						
21 .	PRESSURE RELIEF CONNECTION		N/A						
22	SEALANT INJECTION CONNECTION		Required						
23	SUPPORT LEGS / FEET		N/A						
22 23 24 25 DESIGN DATA	LIFTING EYES		Required for valves ≥ 6	•					
25	LOCKING FACILITY		Required for valves ≥ 4	•					
26	MARKING / TAGGING		Required, as per DESFA	Specification			Note 7		
27	POSITION INDICATOR		Required, as per DESFA	Specification			Note 7		
28	IMPACT TEST TEMPERATURE		Minimum Design Tempe	rature, as per Project Sp	ecification and EN 14141		Note 7		
29	SURFACE TREATMENT		In accordance with DES				Note 7		
30	FIRE SAFE DESIGN		As per API 6FA / EN ISO	10497					
31									
32	T		1						
33	BODY		Fully Killed Fine Grain Carbon Steel P280GH (1.0426 )  Note 4  Fully Killed Fine Grain Carbon Steel P280GH (1.0426 )  Note 4						
34	COVER/BONNET GATE		N/A	arbon Steel P280GH (1.04	120 )		Note 4		
35 36	BALL		NA NA						
37	PLUG		X5CrNiM017-12-2 (SS 1.4401) or equivalent						
38 <b>S</b>	TRIM		N/A	<u> </u>					
38 39 40 41	SEALS		Dual Slip Seals - Viton -	Manufacturer to confirm/	advise for service		Note 1, 2		
40	GASKETS		N/A						
41 ≧	STEM		X5CrNiM017-12-2 (SS 1.	4401) or equivalent					
42	TRUNNION		N/A						
43	SEAT/RINGS STEM SEAL		N/A				Note 0.0		
44 45	BOLTING		Viton / 316 / Graphite				Note 2,6		
46	· · · ·		N/A						
47									
48 <b>9</b>	DESIGN		EN 1594 / EN 13942 / EN 14141 / API 6D / EN 12266-1 / PED 2014/68/EU/ ASME B31.12 PL Option A						
<b>-</b> □ •	DIMENSIONS		EN 13942 / EN 14141 / A	PI 6D					
50	FLANGE DIMENSIONS		N/A		-	-	-		
50 QNATS	WELD END DIMENSIONS		EN 12627						
52 <b>%</b>	CERTIFICATION FIRE TEST		EN 10204 type 3.1 EN 14141 / EN ISO 1049	7					
52 53 54 55 55	HYDROSTATIC TEST		EN 14141 / EN ISO 1049	•			Note 1		
55			**						
56									
57 NOTES									
1.	An additional leak test, with helium as the test medium, shall be carried out after the hydraulic test at 1.1 times rated pressure as API 6D Annex H, para. H4. The test duration								
58	shall be as per Table H.1.  Seals to be suitable for 80°C. Stem to be anti blowout. Seals material shall be suitable or 100% of H2, as per Manufacturers recommendations.								
2. 59	Stem seals shall be fugitive emission to fugitive emission tightness class shall lead to the seal of t	Seams to be suitable to locities to be anti-blowdood. Seals material shall be suitable of 100% of Hz, as per manufacturies recommendations. Stem seals shall be fugitive emission tested in accordance with ISO 15848-2. Test shall be carried out at both ambient and maximum design pressure with helium as fluid. The fugitive emission tightness class shall be BH							
3.		Butt weld end to be pupped. Minimum pup length 500 mm, to be confirmed by vendor. Pup material, wall thickess and internal / external coating shall be same as for the abutting pipe, as per DSF-1105301-1663-SPC-PLN-101 - Piping Classes Specification. Pup material shall comply with ASME B31.12, Part PL option A requirements regarding material properties and wall thickness.							
61 4.	Materials per EN 14141 / EN 12516.				-	-	-		
62 5.	N/A	MTO Character !	haveing strong 1000						
63 6.	Stem extension length as per relevant The stem extension casing shall be eq This Data Sheet relates to Desfa Spec	uipped with a device to	o release pressure in ca	se of leakage from the	stem sealing system.				
64 7. 65	This Data Sheet relates to Desfa Spec	ancadoris for Plug Valv	169500 DOL-940-HIB-0	z+ anu wanuar valve (	pperaturs DOF-OPC-PIP-U3/".				
~~	_ I								

	Valvo Codo	Ī		VDVene	-			
1	Valve Code Valve Description		Diu	XPV60F g Valves < 8" - cla				
2 Tan Na	valve Description			g valves < 0 - cla: PV-xxxx	55 000 - DVV/FL			
3 Tag No.	pressure balanced, lubricated taper	nlug with anti-friction coating, fi		V-AAAA				
	pressure balanceu, lubricateu taper	plug with anti-metion coating, in	re sale design.					
5	· · · · · · · · · · · · · · · · · · ·		T					
6	VALVE SIZE RANGE		2" (DN50) ≤ NPS < 8" (D	N 200)				
7 ∢	VALVE PRESSURE CLASS		#600					
8 <b>T</b>	VALVE TYPE		Plug - Double Block and					
9 -	VALVE END CONFIGURATION			id - Pupped) / RF flange			Note 3	
GENERAL DATA	VALVE SERVICE			sporadic passage of water	er and glycol. Hydrogen blend up to	0 100%.		
1 🖁	VALVE BORE (FULL / REDUCED)		N/A					
	INSTALLATION BODY DESIGN		Above Ground (AG)					
3	FLOW		Bidirectional					
4 5	FLOW		Bidirectional					
	DESIGN PRESSURE (barg)		MINIMUM:	Full Vacuum	MAXIMUM:	80		
6	DESIGN TEMPERATURE (°C)		MINIMUM:	-20	MAXIMUM:	+80	Note 2	
8	VALVE OPERATION			dwheel and Gear Box for		700	Note 7	
9	VENT CONNECTION		N/A					
0	DRAIN CONNECTION		N/A					
1	PRESSURE RELIEF CONNECTIO	N	N/A					
2 4	SEALANT INJECTION CONNECTION		N/A					
3	SUPPORT LEGS / FEET	•	N/A					
DESIGN DATA	LIFTING EYES		Required for valves ≥ 6	•				
5	LOCKING FACILITY		Required for valves ≥ 4	•				
6	MARKING / TAGGING		Required, as per DESFA	Specification			Note 7	
7	POSITION INDICATOR		Required, as per DESFA	Specification			Note 7	
8	IMPACT TEST TEMPERATURE		Minimum Design Tempe	rature, as per Project Sp	ecification and EN 14141		Note 7	
9	SURFACE TREATMENT		In accordance with DES	FA Specification			Note 7	
0	FIRE SAFE DESIGN		As per API 6FA / EN ISO	10497				
1								
2	•		•					
3	BODY		Fully Killed Fine Grain C	arbon Steel P280GH (1.04	126)		Note 4	
4	COVER/BONNET		Fully Killed Fine Grain Carbon Steel P280GH (1.0426 )					
5	GATE		N/A					
6	BALL		NA					
7 <b>"</b>	PLUG		X5CrNiM017-12-2 (SS 1.	4401) or equivalent				
8 9 0 1	TRIM SEALS		N/A					
9 🖁	GASKETS			Manufacturer to confirm/	advise for service		Note 1, 2	
0 ITW	STEM		N/A VEC-NIMO17 12 2 /SS 1	1401) or aguirelant				
1 <b>≥</b> 2	TRUNNION		X5CrNiM017-12-2 (SS 1.	4401) or equivalent				
3	SEAT/RINGS		N/A					
4	STEM SEAL		Viton / 316 / Graphite				Note 2,6	
5	BOLTING		EN 10269, EN 1515-1 &	3 (Bolts: 42CrM04 - 1.72)	25, Nuts: C45E – 1.1191)			
6								
7								
9 8 9	DESIGN		EN 1594 / EN 13942 / EN	14141 / API 6D / EN 1226	6-1 / PED 2014/68/EU/ ASME B31.1	2 PL Option A		
9 <b>AR</b>	DIMENSIONS		EN 13942 / EN 14141 / A	PI 6D				
STAND	FLANGE DIMENSIONS		EN 1759-1					
STA	WELD END DIMENSIONS CERTIFICATION		EN 12627 EN 10204 type 3.1					
2 <b>න්</b> 3 <b>ග</b>	FIRE TEST		EN 10204 type 3.1 EN 14141 / EN ISO 1049	7				
% S S S S S S S S S S S S S S S S S S S	HYDROSTATIC TEST		EN 14141	:			Note 1	
5 5			1					
6								
7 NOTES		<u> </u>						
1.		elium as the test medium, shall	be carried out after the	hydraulic test at 1.1 tin	nes rated pressure as API 6D Ann	ex H, para. H4. The	e test duration	
8	shall be as per Table H.1.  Seals, to be suitable for 80°C.	shall be as per l'able H.1. Seals to be suitable for 80°C. Stem to be anti blowout. Seals material shall be suitable or 100% of H2, as per Manufacturers recommendations.						
2.					th ambient and maximum design		ium as fluid. The	
9		ugitive emission tightness class shall be BH						
		Butt weld end to be pupped. Minimum pup length 500 mm, to be confirmed by vendor. Pup material, wall thickess and internal / external coating shall be same as for the						
3.		butting pipe, as per DSF-1105301-1663-SPC-PLN-101 - Piping Classes Specification. Pup material shall comply with ASME B31.12, Part PL option A requirements regarding						
0	material properties and wall th Materials per EN 14141 / EN 1							
1 4. 2 5.	N/A	2010.						
3 6.	N/A							
4 7.		sfa Specifications for Plug Valve	es≥50 "DSF-SPC-PIP-0	24" and Manual Valve (	Operators "DSF-SPC-PIP-037".			
5		<u> </u>						

4	Valve Code		XPV60G					
	Valve Description		Plug Valves < 2" - clas	s 600 - SW/PF				
_	valve Description	<u>'</u>	XPV-xxxx	3 000 - 3W/KF				
3 Tag No.	recours belonged lubricated topor plus u	with anti-friction agating fire acts design	AF V-AAAA					
	ressure balanced, lubricated taper plug w	with anti-inction coating, life sale design.	, life Sale design.					
5	<b></b>	T	Lian (Divin) a vina (av (Divin)					
6	VALVE SIZE RANGE		1/2" (DN15) ≤ NPS < 2" (DN 50)					
7 ◀	VALVE PRESSURE CLASS	#600						
8 <b>A</b>	VALVE TYPE		and Bleed - Venturi pattern.					
9	VALVE END CONFIGURATION	SW (Socket Weld)				Note 3		
0 ₹	VALVE SERVICE		vith sporadic passage of water	and glycol. Hydrogen blend up to	o 100%.			
8 9 0 0 1 CENERAL DATA	VALVE BORE (FULL / REDUCED)	N/A						
	INSTALLATION	Above Ground (AG						
13	BODY DESIGN	N/A						
4	FLOW	Bidirectional						
5	DESIGN PRESSURE (barg)	MINIMUM:	Full Vacuum	MAXIMUM:	1 00			
6	DESIGN FRESSORE (barg)  DESIGN TEMPERATURE (°C)	MINIMUM:	-20	MAXIMUM:	80 +80	Note 2		
7	VALVE OPERATION		Handwheel and Gear Box for v		+80	Note 2		
8	VENT CONNECTION	N/A	nandwieer and Gear Box for v	aives E 0		Note /		
9	DRAIN CONNECTION	N/A						
20	PRESSURE RELIEF CONNECTION	N/A						
1	SEALANT INJECTION CONNECTION	N/A						
2 140	SUPPORT LEGS / FEET	N/A						
3 N	LIFTING EYES	N/A						
22 23 24 25	LOCKING FACILITY	N/A						
26	MARKING / TAGGING	Required, as per DE	SFA Specification			Note 7		
27	POSITION INDICATOR	Required, as per DE	•			Note 7		
28	IMPACT TEST TEMPERATURE	Minimum Design Te	mperature, as per Project Spe	cification and EN 14141		Note 7		
29	SURFACE TREATMENT	In accordance with	DESFA Specification			Note 7		
30	FIRE SAFE DESIGN	As per API 6FA / EN						
31								
32		<u> </u>						
33	BODY	Fully Killed Fine Gra	in Carbon Steel P280GH (1.042	26)		Note 4		
34	COVER/BONNET	Fully Killed Fine Gra	in Carbon Steel P280GH (1.042	26)		Note 4		
35	GATE	N/A						
36	BALL	N/A						
37	PLUG	X5CrNiM017-12-2 (S	S 1.4401) or equivalent					
WATERIALS	TRIM	N/A						
39 <b>2</b>	SEALS	·	on - Manufacturer to confirm/a	dvise for service		Note 1, 2		
IO II	GASKETS STEM	N/A	0.4.4404)					
··	TRUNNION	X5CFNIMU17-12-2 (S	S 1.4401) or equivalent					
12	SEAT/RINGS	N/A						
14	STEM SEAL	Viton / 316 / Graphit	e			Note 2		
15	BOLTING	EN 10269, EN 1515-	1 & -3 (Bolts: 42CrM04 - 1.722	5, Nuts: C45E - 1.1191)				
16								
17								
G 8	DESIGN	I I		-1 / PED 2014/68/EU/ ASME B31.1	12 PL Option A			
9 <b>A</b>	DIMENSIONS	EN 13942 / EN 1414	I / API 6D					
0 3	FLANGE DIMENSIONS WELD END DIMENSIONS	EN 1759-1 EN 12760						
1 Z X	CERTIFICATION	EN 10204 type 3.1						
<sup>∠</sup> ∞ర	FIRE TEST	EN 14141 / EN ISO 1	0497					
SODES 6	HYDROSTATIC TEST	EN 14141				Note 1		
5 8								
6								
NOTES								
1.	An additional leak test, with helium a shall be as per Table H.1.	as the test medium, shall be carried out after	the hydraulic test at 1.1 time	es rated pressure as API 6D Ann	nex H, para. H4. The	test duration		
8		to be anti-blowout. Seals material shall be s	uitable or 100% of H2 as no	Manufacturers recommendation	ons			
2.	Seals to be suitable for 80°C. Stem to be anti blowout. Seals material shall be suitable or 100% of H2, as per Manufacturers recommendations.  Stem seals shall be fugitive emission tested in accordance with ISO 15848-2. Test shall be carried out at both ambient and maximum design pressure with helium as fluid.					ium as fluid. The		
9	fugitive emission tightness class sha	all be BH			·			
		ım pup length 500 mm, to be confirmed by v						
3.		1663-SPC-PLN-101 - Piping Classes Specific	ation. Pup material shall cor	nply with ASME B31.12, Part P	L option A requirer	nents regarding		
0	material properties and wall thicknes Materials per EN 14141 / EN 12516.	ob.						
51 4. 52 5.	N/A N/A							
3 6.	N/A							
4 7.		pecifications for Valves<50 "DSF-SPC-PIP-02	6" and Manual Valve Operat	ors "DSF-SPC-PIP-037".				
65	<u> </u>		•					

	.,	alva Cada			VDVcci					
1		alve Code ve Description		Dluz	XPV60L Valves ≥ 8" - clas					
2 Tog N		T Description			PV-xxxx	3 000 - DVV - L1				
3 Tag N		ssure balanced, lubricated taper	nlug with anti-friction coating fi		I V AAAA					
<u> </u>	pattorri, proc	nouro paramood, rapmoutou tapor	prag mar ana meterr coating, n	ro caro acorgin						
5		VALVE SIZE RANGE		8" (DN200) ≤ NPS ≤ 12"	(DN 300)					
5		VALVE PRESSURE CLASS		#600	(DN 300)					
,	₹	VALVE TYPE		Plug - Double Block and	Blood - Venturi nattern					
8	<b>ĕ</b>	VALVE END CONFIGURATION			Butt Weld End - Pupped)			Note 3		
9 10	₹	VALVE SERVICE				er and glycol. Hydrogen blend up to	o 100%	Note 3		
11	Ä	VALVE BORE (FULL / REDUCED)		N/A		, , , , , , , , , , , , , , , , , , , ,				
12	GENERAL DATA	INSTALLATION		Below Ground (UG), Dire	ect Buried					
13	·	BODY DESIGN		Fully Welded						
14		FLOW		Bidirectional						
15										
16		DESIGN PRESSURE (barg)		MINIMUM:	Full Vacuum	MAXIMUM:	80			
17		DESIGN TEMPERATURE (°C)		MINIMUM:	-40	MAXIMUM:	+80	Note 2		
18		VALVE OPERATION		Handwheel, Gear Opera	tor Required			Note 7		
19		VENT CONNECTION  DRAIN CONNECTION		N/A N/A						
20		PRESSURE RELIEF CONNECTION	N	N/A						
21 22	≰	SEALANT INJECTION CONNECTION		Required						
23	.YO	SUPPORT LEGS / FEET	-	N/A						
24	DESIGN DATA	LIFTING EYES		Required for valves ≥ 6	•					
25	ES	LOCKING FACILITY		Required						
26	Δ	MARKING / TAGGING		Required, as per DESFA	Specification			Note 7		
27		POSITION INDICATOR		Required, as per DESFA	Specification			Note 7		
28		IMPACT TEST TEMPERATURE		Minimum Design Tempe	rature, as per Project Sp	ecification and EN 14141		Note 7		
29		SURFACE TREATMENT		In accordance with DES	FA Specification			Note 7		
30		FIRE SAFE DESIGN		As per API 6FA / EN ISO	10497					
31										
32										
33		BODY		Fully Killed Fine Grain Carbon Steel P355NL1 (1.0566)  Note 4  Fully Killed Fine Grain Carbon Steel P355NL1 (1.0566)  Note 4						
34		COVER/BONNET GATE		N/A	arbon Steel P355NL1 (1.0	566)		Note 4		
35 36		BALL		N/A						
37		PLUG		X5CrNiM017-12-2 (SS 1.4401) or equivalent						
38	rs	TRIM		X5CrNiM017-12-2 (SS 1.4401) or equivalent N/A						
39	MATERIALS	SEALS		Dual Slip Seals - Viton -	Manufacturer to confirm/	advise for service		Note 1, 2		
40	ATE	GASKETS		N/A						
41	ž	STEM		X5CrNiM017-12-2 (SS 1.	4401) or equivalent					
42		TRUNNION SEAT/RINGS		N/A N/A						
43 44		STEM SEAL		Viton / 316 / Graphite				Note 2,6		
45		BOLTING		N/A				11010 2,0		
46				INA						
47										
48	ARDS	DESIGN				6-1 / PED 2014/68/EU/ ASME B31.1	12 PL Option A			
49	JAR	DIMENSIONS		EN 13942 / EN 14141 / A	PI 6D					
50	STAND	FLANGE DIMENSIONS WELD END DIMENSIONS		N/A EN 12627						
51 52	S	CERTIFICATION		EN 12627 EN 10204 type 3.2						
53	CODES&	FIRE TEST		EN 14141 / EN ISO 1049	7					
54	ODE	HYDROSTATIC TEST		EN 14141				Note 1		
55	<u>გ</u>				·					
56		•								
57	NOTES	An additional look tost with he	alium as the test medium shall	he carried out after the	hydraulic tost at 1 1 ti-	nes rated pressure as ADI CD A	IOVH nara UA 3	he test duration		
58	1.	shall be as per Table H.1.	as the test medium, shall	be carried out after the	nyuraunt test at 1.1 tin	nes rated pressure as API 6D Ann	ісл ії, µdī d. П4. І	ne test durdtion		
		Seals to be suitable for 80°C.				er Manufacturers recommendation				
59	2.	Stem seals shall be fugitive emission tested in accordance with ISO 15848-2. Test shall be carried out at both ambient and maximum design pressure with helium as fluid. The fugitive emission tightness class shall be BH  Butt weld end to be pupped. Minimum pup length 500 mm, to be confirmed by vendor. Pup material, wall thickess and internal / external coating shall be same as for the								
60	3.		5301-1663-SPC-PLN-101 - Pipi			ickess and internal / external coa comply with ASME B31.12, Part P				
61	4.	Materials per EN 14141 / EN 1	2516.							
62	5.	N/A						·		
63	6.		relevant MTO. Stem extension I all be equipped with a device to			stem sealing system				
64	7.		sfa Specifications for Plug Valv							
65										

	Value Code			VPVcot					
	Valve Code /alve Description		Dluz	XPV60N Valves < 8" - clas					
	valve Description			y vaives < o - cias PV-xxxx	22 000 - DAA - F1				
3 Tag No.		h auti fuiation acation f		PV-XXXX					
4 Venturi pattern, pr	essure balanced, lubricated taper plug wit	n anti-inction coating, ii	ire sare design.						
5			1						
6	VALVE SIZE RANGE		2" (DN50) ≤ NPS < 8" (D	N 200)					
7 ◀	VALVE PRESSURE CLASS		#600						
8 AT	VALVE TYPE		Plug - Double Block and						
9	VALVE END CONFIGURATION		Butt Weld / Butt Weld (Butt Weld End - Pupped)  Note 3						
GENERAL DATA	VALVE SERVICE		Sweet Natural Gas with sporadic passage of water and glycol. Hydrogen blend up to 100%.						
11 🖁	VALVE BORE (FULL / REDUCED)		N/A						
_	INSTALLATION		Below Ground (UG), Direct Buried  Fully Welded						
13	BODY DESIGN FLOW		Bidirectional						
14 15	LOW		Bidirectional						
	DESIGN PRESSURE (barg)		MINIMUM:	Full Vacuum	MAXIMUM:	80			
16 17	DESIGN TEMPERATURE (°C)		MINIMUM: -40 MAXIMUM: +80 Note 2						
18	VALVE OPERATION			dwheel and Gear Box for		1	Note 7		
19	VENT CONNECTION		N/A						
20	DRAIN CONNECTION		N/A						
21 .	PRESSURE RELIEF CONNECTION		N/A						
22	SEALANT INJECTION CONNECTION		Required						
23	SUPPORT LEGS / FEET		N/A						
22 23 24 25 DESIGN DATA	LIFTING EYES		Required for valves ≥ 6	•					
25	LOCKING FACILITY		Required for valves ≥ 4	•					
26	MARKING / TAGGING		Required, as per DESFA	Specification			Note 7		
27	POSITION INDICATOR		Required, as per DESFA	Specification			Note 7		
28	IMPACT TEST TEMPERATURE		Minimum Design Tempe	rature, as per Project Sp	ecification and EN 14141		Note 7		
29	SURFACE TREATMENT		In accordance with DES	FA Specification			Note 7		
30	FIRE SAFE DESIGN		As per API 6FA / EN ISO	10497					
31									
32									
33	BODY		Fully Killed Fine Grain Carbon Steel P275NL1 (1.0488)  Note 4  Fully Killed Fine Grain Carbon Steel P275NL1 (1.0488)  Note 4						
34	COVER/BONNET			arbon Steel P275NL1 (1	.0488)		Note 4		
35	GATE BALL		N/A						
36	PLUG		N/A X5CrNiM017-12-2 (SS 1.4401) or equivalent						
37 38 <b>%</b>	TRIM		N/A	4401) or equivalent					
39 <b>K</b>	SEALS			Manufacturer to confirm/	advise for service		Note 1, 2		
38 39 40 41	GASKETS		N/A				,		
41 <b>Y</b>	STEM		X5CrNiM017-12-2 (SS 1.	4401) or equivalent					
42	TRUNNION		N/A						
43	SEAT/RINGS		N/A						
44	STEM SEAL BOLTING		Viton / 316 / Graphite				Note 2,6		
45	BOLTING		N/A						
46									
47 40 <b>0</b>	DESIGN		EN 1594 / EN 13942 / EN 14141 / API 6D / EN 12266-1 / PED 2014/68/EU/ ASME B31.12 PL Option A						
48 49	DIMENSIONS		EN 13947 EN 139427 EN EN 13942 / EN 14141 / A		25 25 20/ Ed/ Admic Bol.	<b>_ op.o</b> ii A			
50	FLANGE DIMENSIONS		N/A						
50 QIVE 51 51 51 51 51 51 51 51 51 51 51 51 51	WELD END DIMENSIONS		EN 12627						
52 <b>⋈</b>	CERTIFICATION	-	EN 10204 type 3.1	-	<del></del>		· · · · ·		
52 53 54 55 55	FIRE TEST		EN 14141 / EN ISO 1049	7					
54	HYDROSTATIC TEST		EN 14141				Note 1		
•									
56 57 <b>NOTES</b>	T								
	An additional leak test, with helium as the test medium, shall be carried out after the hydraulic test at 1.1 times rated pressure as APLED Appear Hi para, HA. The test duration								
58 1.	shall be as per Table H.1.								
2.	Seals to be suitable for 80°C. Stem to be anti blowout. Seals material shall be suitable or 100% of H2, as per Manufacturers recommendations.  Stem seals shall be fugitive emission tested in accordance with ISO 15848-2. Test shall be carried out at both ambient and maximum design pressure with helium as fluid. The								
59		fugitive emission tightness class shall be BH  Butt weld end to be pupped. Minimum pup length 500 mm, to be confirmed by vendor. Pup material, wall thickess and internal / external coating shall be same as for the							
3.	abutting pipe, as per DSF-1105301-16	63-SPC-PLN-101 - Pipi							
60 61 4.	material properties and wall thickness.  Materials per EN 14141 / EN 12516.								
62 5.	N/A								
6	Stem extension length as per relevant								
63 64 7.	The stem extension casing shall be ed This Data Sheet relates to Desfa Spe								
65	Data crist rolates to Desila Ope	var	00 20. 010111-0						
	•								

		alva Code			VOVOC					
1		alve Code		Coto There	XGV60L	- - class 600 - BW - LT				
2	1	ve Description				- class 600 - BW - L1				
3	Tag No.				GV-xxxx					
4	Slab type, Through C	Conduit, Double seated floating s	seats, Throttling, Double Block	and Bleed, Non Rising S	stem, fire safe design.					
5										
6	ı	VALVE SIZE RANGE		8" (DN200) ≤ NPS ≤ 12" (	DN 300)					
7	a	VALVE PRESSURE CLASS		#600						
8	AT.	VALVE TYPE		Gate, Slab type, Double	block and bleed, Throttlir	ng.				
9	٥	VALVE END CONFIGURATION		Butt Weld / Butt Weld (B				Note 3		
10	RA	VALVE SERVICE			poradic passage of wate	r and glycol. Hydrogen blend up to	100%.			
11	GENERAL DATA	VALVE BORE (FULL / REDUCED)		Full Port						
12		INSTALLATION		Below Ground (UG), Dire	ct Buried					
13	ı	BODY DESIGN FLOW		Fully Welded						
14 15		FLOW		Bidirectional						
		DESIGN PRESSURE (barg)		MINIMUM:	Full Vacuum	MAXIMUM:	80			
16 17	ı	DESIGN TEMPERATURE (°C)		MINIMUM:	-40	MAXIMUM:	+80	Note 2		
18	ı	VALVE OPERATION		Handwheel, Gear Operat		ing stations.	100	Note 7		
19		VENT CONNECTION		1" Valved and plugged,				Note 9		
20		DRAIN CONNECTION		1" Valved and plugged,				Note 9		
21		PRESSURE RELIEF CONNECTION	I	Required	-			Note 5		
22	Ā	SEALANT INJECTION CONNECTION		Required				Note 9		
23	Δ	SUPPORT LEGS / FEET		Required						
24	DESIGN DATA	LIFTING EYES		Required						
25	ES	LOCKING FACILITY		Required						
26	ü	MARKING / TAGGING		Required, as per DESFA	Specification			Note 7		
27		POSITION INDICATOR		Required, as per DESFA	Specification			Note 7		
28		IMPACT TEST TEMPERATURE		Minimum Design Tempe	rature, as per Project Spe	ecification and EN 14141		Note 7		
29		SURFACE TREATMENT		In accordance with DES				Note 7		
30	ı	FIRE SAFE DESIGN		As per API 6FA / EN ISO	10497					
31										
32				1						
33		BODY			arbon Steel P355NL1 (1.0			Note 4		
34	ı	COVER/BONNET		Fully Killed Fine Grain Carbon Steel P355NL1 (1.0566)  Note 4  Y5CrNiM017.12-2 (SS 1.4401) or equivalent						
35	j ,	GATE BALL		X5CrNiM017-12-2 (SS 1.4401) or equivalent Note 8 N/A						
36 37		PLUG		WA NA						
38	ĽS	TRIM		WA NA						
39	MATERIALS	SEALS		Sealant - Manufacturer t	o propose for service			Note 1, 2		
40	Ī	GASKETS		N/A						
41	ž	STEM		X5CrNiM017-12-2 (SS 1.4	1401) or equivalent					
42		TRUNNION		N/A						
43		SEAT/RINGS STEM SEAL			eats, metal to metal with lesign of equivalent or be			No. o o		
44 45		BOLTING		N/A	lesign of equivalent of be	etter quality.		Note 2,6		
46		-								
47				1						
48	တ	DESIGN		EN 1594 / EN 13942 / EN 14141 / API 6D / EN 12266-1 / PED 2014/68/EU/ ASME B31.12 PL Option A						
49	ARDS	DIMENSIONS		EN 13942 / EN 14141 / A	PI 6D					
50		FLANGE DIMENSIONS		N/A						
51	)TA	WELD END DIMENSIONS		EN 12627						
52	ر «و	CERTIFICATION FIRE TEST		EN 10204 type 3.2	,					
53 54	CODES & STAND	FIRE TEST HYDROSTATIC TEST		EN 14141 / EN ISO 10497 EN 14141				Note 1		
54 55	ŏ	TIPNOGIANO IESI		LIT 17171				NOTE 1		
56				I						
57	NOTES									
		An additional leak test, with he	lium as the test medium, shall	be carried out after the	hydraulic test at 1.1 tim	nes rated pressure as API 6D Ann	ex H, para. H4. Tl	ne test duration		
58		shall be as per Table H.1.								
						er Manufacturers recommendation		olium oc fluid The		
59		Stem seals shall be fugitive en fugitive emission tightness clas		ui io∪ io846-∠. Test sh	an be carried out at bot	h ambient and maximum design	pressure with he	anum as muid. The		
-				be confirmed by vendo	or. Pup material, wall thi	ickess and internal / external coa	ating shall be sar	ne as for the		
	3.	abutting pipe, as per DSF-1105301-1663-SPC-PLN-101 - Piping Classes Specification. Pup material shall comply with ASME B31.12, Part PL option A requirements regarding								
60		material properties and wall the								
61		Materials per EN 14141 / EN 1			Labalita de la Seco		P	1112		
62		Pressure relief connection shall directely to the ball valve body			snall be valved with pl	lug valve class 1500 with metallic	c sealing mounte	a by welding		
υ∠		Stem extension length as per r			osure,rigidly mounted to	o valve body.				
63	б.	The stem extension casing sha	II be equipped with a device to	release pressure in cas	se of leakage from the s	tem sealing system.				
64			•			nual Valve Operators "DSF-SPC-	-PIP-037".			
65	8.	Manufacturer shall advise on s	eat & disk materials to achieve	durability against thrott	ing wear.					

The connection shall extend to surface/ground level near valve operator, with two block valves, Class 1500, mounted on the valve body and at the free end, respectively.

. lī	1/-	hua Carda			VOVCO					
1		Ive Code		Coto Thro	XGV60N	- class 600 - BW - LT				
2		e Description				- Class 600 - BW - L1				
3	Tag No.	10.5 11 . 18 .			GV-xxxx					
4	Slab type, Through C	onduit, Double seated floating s	seats, Throttling, Double Block a	and Bleed, Non Rising S	stem, fire safe design.					
5										
6		VALVE SIZE RANGE		2" (DN50) ≤ NPS < 8" (DN 200)						
7		VALVE PRESSURE CLASS		#600						
8	Ą	VALVE TYPE		Gate, Slab type, Double	block and bleed, Throttli	ng.				
9	۵	VALVE END CONFIGURATION		Butt Weld / Butt Weld (B	utt Weld End - Pupped)			Note 3		
10	ZAL	VALVE SERVICE		Sweet Natural Gas with sporadic passage of water and glycol. Hydrogen blend up to 100%.						
11	GENERAL DATA	VALVE BORE (FULL / REDUCED)		Full Port						
12	GEI	INSTALLATION		Below Ground (UG), Dire	ct Buried					
13		BODY DESIGN		Fully Welded						
14		FLOW		Bidirectional						
15										
16		DESIGN PRESSURE (barg)		MINIMUM:	Full Vacuum	MAXIMUM:	80			
17		DESIGN TEMPERATURE (°C)		MINIMUM: -40 MAXIMUM: +80 Note 2						
18		VALVE OPERATION		Handwheel, Gear Operat	or Required			Note 7		
19		VENT CONNECTION		Plugged according to ma	anufacture standard.			Note 9		
20		DRAIN CONNECTION		Plugged according to ma	anufacture standard.			Note 9		
21	ď	PRESSURE RELIEF CONNECTION		Required				Note 5		
22	AT,	SEALANT INJECTION CONNECTIO	)N	Required				Note 9		
23	_	SUPPORT LEGS / FEET		N/A						
24	<u>i</u> g	LIFTING EYES		Required for valves ≥ 6"						
25	DES	LOCKING FACILITY		Required for valves ≥ 4"						
26	_	MARKING / TAGGING		Required, as per DESFA	-			Note 7		
27		POSITION INDICATOR		Required, as per DESFA				Note 7		
28		IMPACT TEST TEMPERATURE		Minimum Design Tempe	rature, as per Project Sp	ecification and EN 14141		Note 7		
29		SURFACE TREATMENT		In accordance with DESI	A Specification			Note 7		
30		FIRE SAFE DESIGN		As per API 6FA / EN ISO 10497						
31										
32										
33		BODY		Fully Killed Fine Grain Carbon Steel P275NL1 (1.0488) Note 4						
34		COVER/BONNET		Fully Killed Fine Grain Ca		.0488)		Note 4		
35	L	GATE		X5CrNiM017-12-2 (SS 1.4	401) or equivalent			Note 8		
36		BALL PLUG		N/A N/A						
37 38		TRIM		N/A						
39	MATERIALS	SEALS		Sealant - Manufacturer to	n propose for service			Note 1, 2		
40	ĒR	GASKETS		N/A	proposo for solvinos			Note 1, 2		
41	ΕΨ	STEM		X5CrNiM017-12-2 (SS 1.4	401) or equivalent					
42	_	TRUNNION		N/A	, or oquiruloni					
43		SEAT/RINGS		Double seated floating s	eats, metal to metal with	resilient inserts.				
44		STEM SEAL		Dual O-rings or special of	lesign of equivalent or b	etter quality.		Note 2,6		
45		BOLTING		N/A						
46										
47										
48	ARDS	DESIGN				66-1 / PED 2014/68/EU/ ASME B31.	12 PL Option A			
49	JAF	DIMENSIONS		EN 13942 / EN 14141 / AI	PI 6D					
50	ANE	FLANGE DIMENSIONS WELD END DIMENSIONS		N/A EN 12627						
51 52	ST,	CERTIFICATION		EN 12627 EN 10204 type 3.1						
52 53	∞ (C	FIRE TEST		EN 14141 / EN ISO 10497	,					
54	ñí	HYDROSTATIC TEST		EN 14141				Note 1		
55	8									
56										
57	NOTES									
[	1	,	lium as the test medium, shall b	be carried out after the	hydraulic test at 1.1 tin	nes rated pressure as API 6D An	nex H, para. H4. The	test duration		
58		Shall be as per Table H.1.	Ctom to be onti-laward Carle	motorial abell be as 201	lo or 1000/ =f 110	or Manufacturors	iona			
1						er Manufacturers recommendati th ambient and maximum design		ium as fluid. The		
59		fugitive emission tightness clas		11 100 10040 2. 1001 011	an be carried out at bo	ar ambient and maximum design	ii pressure wiiii nei	iam ao naia. Tric		
		Butt weld end to be pupped. M	linimum pup length 500 mm, to	be confirmed by vendo	r. Pup material, wall th	ickess and internal / external co	pating shall be sam	e as for the		
				ng Classes Specification	n. Pup material shall co	omply with ASME B31.12, Part F	PL option A requirer	ments regarding		
60		material properties and wall thi								
61		Materials per EN 14141 / EN 12								
60					shall be valved with p	lug valve class 1500 with metall	lic sealing mounted	by welding		
62			and fitted with a threaded solid elevant MTO. Rising stem shall		sure rigidly mounted to	o valve body.				
			Ill be equipped with a device to							
63						nual Valve Operators "DSF-SP0	C-PIP-037".			
63 64	7.									
ŀ	8.		eat & disk materials to achieve			mounted on the valve body and				