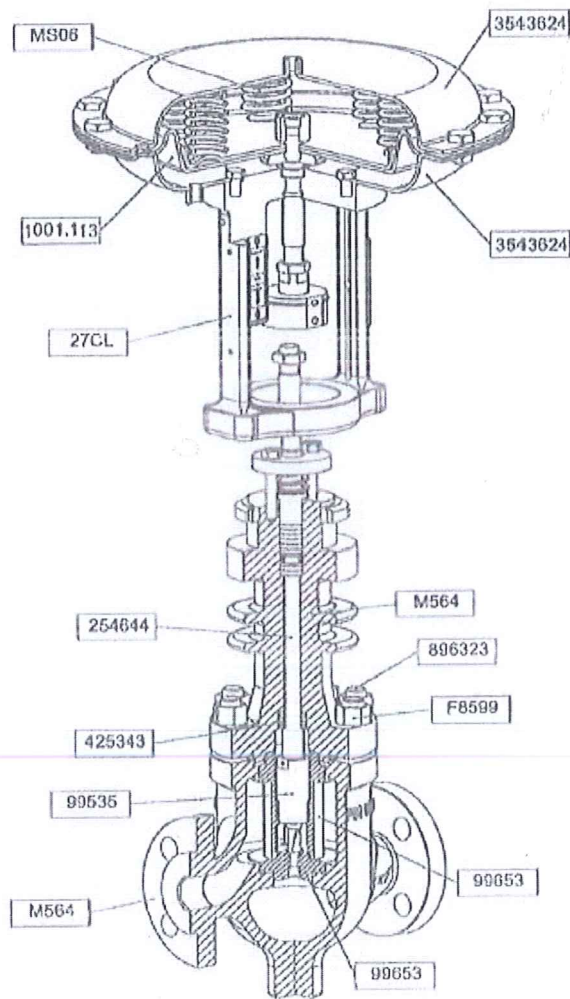


CONFLOW s.p.a.		PMI	rev. 1
		15/06/2012	Page 1/1
		Emmision	R.Lazzari

Cliente/Customer :	FIMIN sas		
Conferma d'Ordine / Order Confirmation N° :	2.604	del / dated	20/03/2012
Ordine Cliente / Customer purchasing Order N° :	12/00469	del / dated	16/03/2012
Ordine Eng./ Engineering purchasing Order N° :	OA1200050	del / dated	16/03/2012
Matricola / Serial Number N° :	121705-06		
Data sheet TAG N° :	22-LCV-8004 / 08		
	PMI		

HEAT NUMBERS for Body Group and ref. Parts for actuator



CCIAA - CNA - PMI SpA
 36100 - Vicenza - Italy
 Tel. +39 0444 500000
 Fax +39 0444 500001
 Email: info@pmi.it

22-LCV-8004 / 22-LCV-8008 CALCULATION SHEET

CONVAL® by F.I.R.S.T., Version 6.0 (Build 8.0.2)

Control valve: DG IMPIANTI INDUSTRIALI (1)

16/03/2012 9.23.21

Calculation header

Identifier
Tag No. DG IMPIANTI INDUSTRIALI (1)
22-LCV-8004 & 22-LCV-8008

Medium selection and state

Medium Triethylene Glycol
State Liquid

Operating data

	Maximum flow	Mean flow	Minimum flow	
t1	45,0	45,0	46,0	°C
p1	58,26	58,26	58,26	bar(g)
p2	6,5	6,5	6,5	bar(g)
Cv	0,4413	0,40727	0,30148	GPM(US)
⊙ qm	2.805,0	2.550,0	1.785,0	kg/h
○ qv	2,5307	2,3007	1,6105	m³/h
	Transitional flow	Transitional flow	Transitional flow	
	Incipient cavitation	Incipient cavitation	Incipient cavitation	

Fluid operating data

	Maximum flow	Mean flow	Minimum flow	
p1	1.108,4	1.108,4	1.108,4	kg/m²
pv1	9,8912E-6	9,8912E-6	9,8912E-6	bar(a)

Pipe downstream of valve

⊙ Size class downstream of valve DN2 1"
Pressure class downstream of valve PN2 Schedule 40

Valve selection

Valve manufacturer CONFLOW
Series HP 60 CPL-CPE contoured plug
Valve selection Cv: 0,57, 1", mfp linear, Measured ...
 Valve from database

Valve data

Valve type Globe valve
Trim type Cage trim
Flow direction FTO
Basic characteristic Measured values (lin)
Nominal flow coefficient Cv100 0,57 GPM(US)
Selected valve size DN 1"

Load-dependent auxiliary values

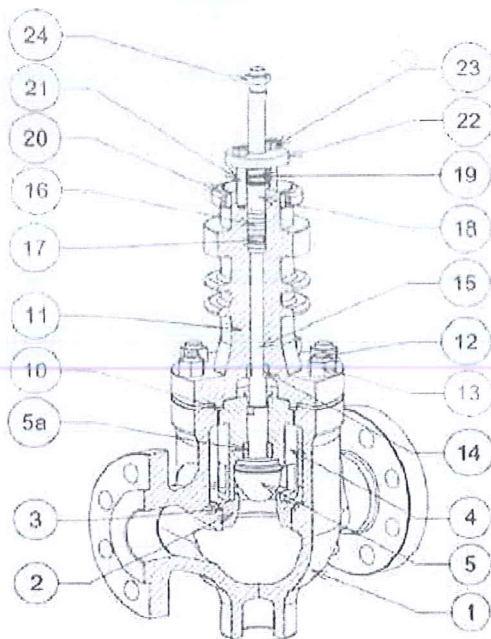
	Maximum flow	Mean flow	Minimum flow	
Cv/Cv100	77,422	71,451	52,891	%
u1	1,4321	1,3019	0,91134	m/s
u2	1,4321	1,3019	0,91134	m/s
l.pAe	73,8	73,2	70,8	dB(A)
P	3,6386	3,3079	2,3155	kW
xF	0,873	0,873	0,873	-
FL²	0,943	0,945	0,948	-
Kc	0,916	0,918	0,923	-
xFz	0,698	0,705	0,73	-

TRIM CPL - CPE - CPT			CARBON STEEL		STAINLESS STEEL
			Acciaio Carbonio		Acciaio Inox
TEMPERATURE RANGE			- 20 / +425 °C	- 45 / +343 °C	- 196 / +425 °C
Range Temperature					
Item	Description	Descrizione			
1	Body	Corpo	A 216 WCB (1)	A 352 LCB (1)	A351 CF8M
2	Seat	Sede	AISI 316 + stellite		
3	Seat Gasket	Guarnizione Sede	Thermicullite 815		
4	Main Cage	Gabbia principale	AISI 316		
5	Contoured Linear Plug (Fig.1) Equipercantage Plug (Fig.2) Quick-opening Plug (Fig.3)	Otturatore Profilato Lineare (Fig.1) Otturatore Profilato Equiperc. (Fig.2) Otturatore Apertura Rapida (Fig.3)	AISI 316 + stellite		
5a	Cage guide bushing	Bussola guida gabbia	AISI 304		
5b	Superior plug plate	Fondello superiore ten. soffice	AISI 316		
5c	Soft seal class VI ^o	Anello di tenuta classe VI ^o	PTFE or PTFE/GR		
5d	Plug screw	Vite serraggio otturatore	ISO 4762 Cl. A2		
10	Body Gasket	Guarnizione Corpo	Spirometal / Spirotallica - AISI 304 + Graphite		
11	Bonnet	Flangia superiore	A 216 WCB (1)	A 352 LCB (1)	A351 CF8M
12	Body Stud Bolts	Prigionieri corpo	A193 B7 galv.	A193 B7 (2) galv.	A193 B7 (2) galv.
13	Body Nuts	Dadi	A194 2H galv.	A194 2H (2) galv.	A194 2H (2) galv.
14	Guide bushing	Bussola guida	AISI 304		
15	Stem	Stelo	AISI 316		
16	Packing	Premistoppa	Pure Graphite - Grafite Pura PTFE (PTFE V rings 100 %) PTFE/GR (PTFE V RINGS 85% + Graphite V rings 15 %)		
17	Snore-piece packing	Lanterna	AISI 316		
18	Packing Guide	Bussola prem.	AISI 316		
19	Packing Spring	Molla prem.	AISI 302		
20	Yoke Lock Nut	Ghiera blocc. Cast.	Carbon steel Cl. 6S galvanized - Acc. Carb. Zincato Cl. 6S		
21	Packing Stud Bolts	Tiranti prem.	A193 B8		
22	Packing flange	Flangia prem.	AISI 304		
23	Packing Lock Nuts	Dadi tiranti prem.	A 194 Gr.8		
24	Stem nut	Dado serr. Stelo	A 194 Gr.8		

- (1) Silicon high temperature painture up to 600 °C 25 μ
 (2) For temperature < - 20 °C s.s. A193 B8 + A194 Gr.8

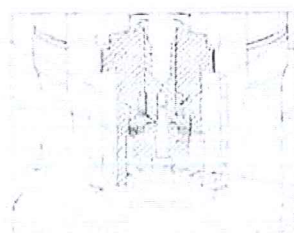
Verniciatura silconica resistente alle alte temperature 600 °C 25 μ
 Per temperature < - 20 °C Acc. Inox A193 B8 + A194 Gr.8

DN 25 - 50



5b

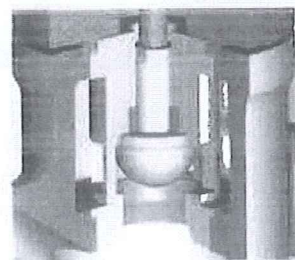
5c



5a SOFT SEAL Detail

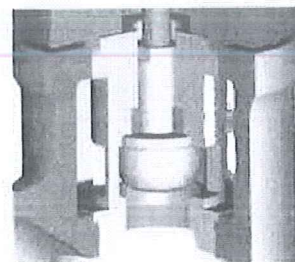
5 Dettaglio TENUITA SOFFICE
 5d

Trim Types - Tipi di otturatore



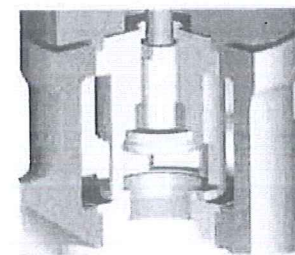
CONTOURED LINEAR PLUG
 from DN 25 to DN 50
 not balanced

OTTURATORE PROFILATO LINEARE dal DN 25 al DN 50 non bilanciato



CONTOURED EQUIPERCENTAGE PLUG
 from DN 25 to DN 50
 not balanced

OTTURATORE PROFILATO EQUIPERCENTUALE dal DN 25 al DN 50 non bilanciato



QUICK-OPENING PLUG
 from DN 25 to DN 50
 not balanced

OTTURATORE APERTURA RAPIDA dal DN 25 al DN 50 non bilanciato