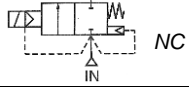


Media: air – water – gas – light oil  
 Pressure range: 0.5 to 15 Bar max  
 Media temperature: -40°C +160°C max  
 Ambient temperature: -20°C to +60°C  
 Media viscosity: 50 centistokes max  
 Mounting: coil upright  
 Opening / Closing time: 50 mSec Max



# 2/2 Brass

## 3/8 – 3"

### NORMALLY CLOSED

### 2 WAY SERVO ASSISTED

### 0.5 – 15 Bar

## TYPE PU225®



#### PRESSURE

Ø Port BSP	Ø Orifice (mm)	Flow Kv Ltr/ min	Coil	Pressure Rating (Bar) ΔP		Max Working	Seals	Max Media Temp. °C	Part Number
				Min	Max				
3/8	13	40.0	22003	0.5	10	15	NBR FKM EPDM	80 130 160	PU22503 + voltage PU22503V + voltage PU22503E + voltage
1/2	13	40.0	22003	0.5	10	15	NBR FKM EPDM	80 130 160	PU22504A + voltage PU22504AV + voltage PU22504AE + voltage
3/4	25	165.0	22003	0.5	10	15	NBR FKM EPDM	80 130 160	PU22506A + voltage PU22506AV + voltage PU22506AE + voltage
1	25	165.0	22003	0.5	10	15	NBR FKM EPDM	80 130 160	PU22508A + voltage PU22508AV + voltage PU22508AE + voltage
1 1/4	38	367	22003	0.5	10	15	NBR FKM EPDM	80 130 160	PU22512A + voltage PU22512AV + voltage PU22512AE + voltage
1 1/2	38	500	22003	0.5	10	15	NBR FKM EPDM	80 130 160	PU22514A + voltage PU22514AV + voltage PU22514AE + voltage
2	50	600	22003	0.5	10	15	NBR FKM EPDM	80 130 160	PU22520A + voltage PU22520AV + voltage PU22520AE + voltage
2 1/2	65	1050	16W	0.3	10	15	NBR FKM EPDM	80 140 120	PU22524A + voltage PU22524AV + voltage PU22524AE + voltage
3	80	1380	16W	0.3	10	15	NBR FKM EPDM	80 140 120	PU22528A + voltage PU22528AV + voltage PU22528AE + voltage

#### OPTIONS

IP65 Coil & Connector PG9 – DIN 43650 A  
 NPT Thread (Not available 2 1/2" & 3")  
 ATEX EExmII T4 II 2G & 2D IP65 T130°C   
 Explosion proof enclosure ATEX II 2 G/D EExdIICT6 IP65 +85°C

#### ELECTRICAL DATA

Voltage (-10% + 10%) Continuous duty 100%		Coil	Power Consumption		Insulation class	Enclosure	Electrical connections
~	=		Inrush	Holding			
~	12-24-48-110-220-240-380 (50/60 Hz)	22003	23VA	17VA	H 180°C	IP 65 with connector	3 spades DIN 43650A DIN 40050 VDE 0110
=	12 – 24 – 48 -110- 220 (DC)		15 Watts				
~	24-48-110-230 (50/60 Hz)	16W	25VA	15VA	F 155°C		
=	12 – 24 – 48 (DC)		16 Watts				

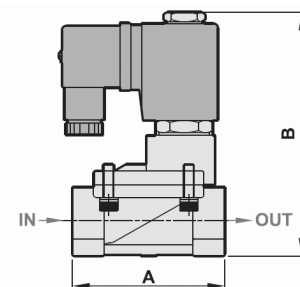
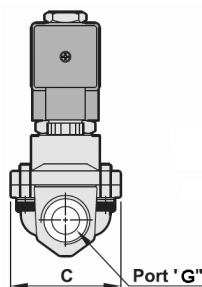
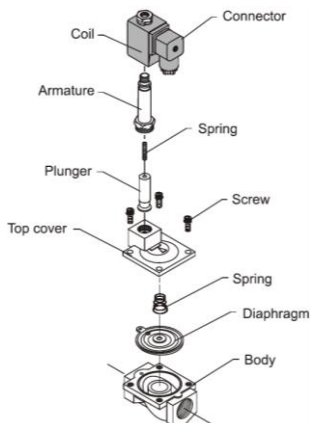
#### CONSTRUCTION

Body: Forged Brass SS41, Tube and internal parts: Stainless steel  
 Seals and gaskets: NBR (Optional EPDM, FKM & HNBR)  
 Moulded coil: 16 W Resin / 22003 DuroPlast ThermoSet Resin

#### REPAIR KIT

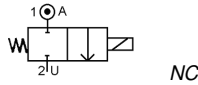
Diaphragm Seal	225 + Size code (03-28) + seal material
Coil	Coil type (22003 or 16W) + voltage
Armature assembly (Normally Closed)	225320VNC

#### OVERALL DIMENSIONS



Port	A	B	C	Kg
3/8 1/2	66.5	106.5	48	0.725
3/4 1	96	126.5	70	1.565
1 1/4 1 1/2	131	145.5	96	2.56
2	130	160.5	112	3.9
2 1/2	245	186	184	9.5
3	250	196	184	11.23

Media: vacuum (10 Torr) - air - water - light oil  
 Pressure range: 0 to 10 bar max  
 Media temperature: 100°C  
 Ambient temperature: -30° to +40°C  
 Media viscosity: 50 centistokes  
 Mounting: preferred coil upright  
 Opening / Closing 100 mSec Max



# 2/2 Stainless

## 3/8 - 2

### NORMALLY CLOSED

### 2 WAY ASSISTED LIFT

### 0 - 10 Bar

## TYPE MD316



#### PRESSURE

Ø Port BSPT	Ø Orifice (mm)	Flow Kv Ltr/ min	Pressure Rating (Bar) ΔP			Seals	Part Number	List Price
			Min	Max Air/ Water	Max Oil			
3/8	16	61.7	0	10	7	EPDM NBR	MD14316M16E + voltage MD14316M16N + voltage	£121.25
1/2	16	61.7	0	10	7	EPDM NBR	MD15316M16E + voltage MD15316M16N + voltage	£121.25
3/4	23	105.0	0	10	7	EPDM NBR	MD20316M16E + voltage MD20316M16N + voltage	£138.09
1	28	133.3	0	10	7	EPDM NBR	MD25316M16E + voltage MD25316M16N + voltage	£161.66
1 1/4	32	217	0	10	7	EPDM NBR	MD32316M16E + voltage MD32316M16N + voltage	£232.39
1 1/2	40	338	0	10	7	EPDM NBR	MD40316M16E + voltage MD40316M16N + voltage	£286.27
2	50	533	0	10	7	EPDM NBR	MD50316M16E + voltage MD50316M16N + voltage	£370.47

#### OPTIONS

IP65 Coil & Connector PG11 - DIN 43650 A  
 NPT Thread  
 No Shading Ring (DC voltages only)  
 FKM Seals

Included  
 +10%  
 +£33.00  
 +11%

#### ELECTRICAL DATA

Voltage (-10% + 10%) Continuous Duty 100%	Coil	Power Consumption		Insulation class	Enclosure	Electrical connections
		Inrush	Holding			
~ 24 - 110 - 230 (50 or 60 Hz)	M16	70VA	35VA	F 155°C	IP 65 with connector	3 spades DIN 43650 DIN 40050 VDE 0110
= 12 - 24 (DC)		26 Watts				

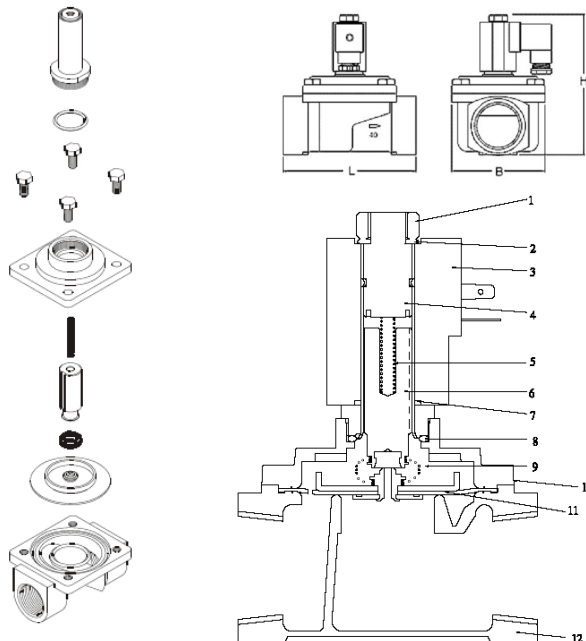
#### CONSTRUCTION

Body: 316 Stainless Steel (CF8M)  
 Tube and internal parts: 304, 430F Stainless steel  
 Seals and gaskets: EPDM (Optional NBR)  
 Shading Ring: Copper  
 Moulded coil: Resin F rated

#### REPAIR KIT

Diaphragm seal	MDSUS + orifice + material
Coil	M16 + voltage
Armature assembly	SP + Valve Part Number - ARMATURE

#### OVERALL DIMENSIONS

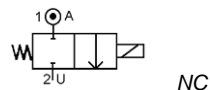


Model	Port	L	B	H	Kg
MD15	1/2	70	52	112	0.8
MD20	3/4	80	62	122	1
MD25	1	90	72	132	1.25
MD32	1 1/4	120	83	138	1.9
MD40	1 1/2	136	97	140	2.6
MD50	2	160	112	150	4

N.O.	Descriptions	Material
1	NUT	SUS304
2	O ring	NBR
3	IP 65 molding coil	
4	Packless a'ssy	SUS304, KM-31
5	Plunger spring	SUS304
6	Plunger	KM-31
7	O ring	NBR
8	O ring	NBR
9	Spring	SUS304
10	Valve bonnet	3/8"-1"(C3771BE/SCS14) 1-1/4"-2"(BC 6/SCS14)
11	Diaphragm a'ssy	SUS304, BSBF(SUS304) NBR(EPDM)(VITON)
12	Valve body	3/8"-1"(C3771BE/SCS14) 1-1/4"-2"(BC 6/SCS14)

\*(SCS14) Valve bonnet, Valve body material SCS14.

Media: vacuum (10 Torr) - air - water - light oil  
 Pressure range: 0 to 10 Bar max  
 Media temperature: +90°C  
 Ambient temperature: -30°C to +40°C (+50°C\*)  
 Media viscosity: 50 centistokes  
 Mounting: preferred coil upright  
 Opening / Closing 100 mSec Max



# 2/2 Stainless

3/8 - 2"

## NORMALLY CLOSED

## 2 WAY ZERO RATED

0 - 10 Bar

### TYPE MD316



#### PRESSURE

Ø Port BSPT	Ø Orifice (mm)	Flow Kv Ltr/ min	Pressure Rating (Bar)			Seals	Part Number
			Min	Max Air/ Water	Max Oil		
1/2	16	61.7	0	10	7	EPDM NBR FKM	MD15316M16E + voltage MD15316M16N + voltage MD15316M16V + voltage
3/4	23	105.0	0	10	7	EPDM NBR FKM	MD20316M16E + voltage MD20316M16N + voltage MD20316M16V + voltage
1	28	133.3	0	10	7	EPDM NBR FKM	MD25316M16E + voltage MD25316M16N + voltage MD25316M16V + voltage
1 1/4	32	217	0	10	7	EPDM NBR FKM	MD32316M16E + voltage MD32316M16N + voltage MD32316M16V + voltage
1 1/2	40	338	0	10	7	EPDM NBR FKM	MD40316M16E + voltage MD40316M16N + voltage MD40316M16V + voltage
2	50	533	0	10	7	EPDM NBR FKM	MD50316M16E + voltage MD50316M16N + voltage MD50316M16V + voltage

#### OPTIONS

IP65 Coil & Connector PG11 - DIN 43650 A  
 NPT Thread  
 Without Shading Ring (DC voltages only)  
 M17 Class N High Power Coil +50°C Ambient, 0 to 16 Bar (MDxx316M17 + seal + voltage)

#### ELECTRICAL DATA

	Voltage (-10% + 10%) Continuous Duty 100%	Coil	Power Consumption		Insulation class	Enclosure	Electrical connections
			Inrush	Holding			
~	24 - 110 - 230 (50 or 60 Hz)	M16	70VA	35VA	F 155°C	IP 65 with connector	3 spades DIN 43650A DIN 40050 VDE 0110
=	12 - 24 - 48 - 125 (DC)		26 Watts				

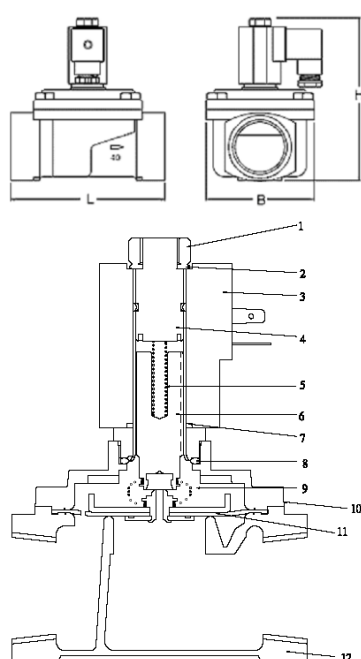
#### CONSTRUCTION

Body: 316 Stainless Steel (CF8M)  
 Tube and internal parts: 304, 430F Stainless steel  
 Seals and gaskets: EPDM (Optional NBR or Viton®)  
 Shading Ring: Copper (Option for silver shading ring)  
 Moulded coil: Resin F rated

#### REPAIR KIT

Diaphragm seal	MD + orifice + material
Coil	Coil type (M16 or M17) + voltage
Armature assembly	SP + Valve Part Number - ARMATURE

#### OVERALL DIMENSIONS



Model	Port	L	B	H	Kg
MD15	1/2	70	52	112	0.8
MD20	3/4	80	62	122	1
MD25	1	90	72	132	1.25
MD32	1 1/4	120	83	138	1.9
MD40	1 1/2	136	97	140	2.6
MD50	2	160	112	150	4

Part	Description	Material
1	Nut	SUS304
2	O Ring	NBR
3	IP65 Moulded Coil	
4	Packless Ass'y	SUS304
5	Plunger Spring	SUS304
6	Plunger	SUS304, KM31
7	O Ring	NBR
8	O Ring	NBR
9	Spring	SUS304
10	Valve Bonnet	3/8-1" C3771BE/SCS14 1 1/4 - 2" BC 6/SCS14
11	Diaphragm	SUS304, BSBF(SUS304) NBR, EPDM or Viton
12	Valve Body	3/8-1" C3771BE/SCS14 1 1/4 - 2" BC 6/SCS14