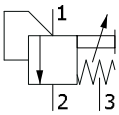
LA..QA type
logic element - 3 ways

- Pilot to close configuration
- Fixed or adjustable Stand-by
- SAE10 and SAE16 cavities

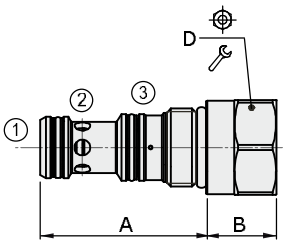
Technical specifications and diagrams are measured with mineral oil of 46 cSt viscosity at 40°C *(104°F)* temperature.

		LA10QA	LA16QA
Nominal flow		80 l/min *(21 US gpm)*	190 l/min *(50 US gpm)*
Max. pressure		350 bar *(5100 psi)*	
Opening pressure		1, 5, 10 bar - regolabile: da 8 a 15 bar	
Oil leakage	at 210 bar *(3050 psi)*	80 cm³/min *(4.88 in³/min)*	230 cm³/min *(14.03 in³/min)*
Fluid		mineral based oil	
Viscosity		10-200 cSt	
Max level of contamination		20/18/14 ISO4406	
Fluid temperature	*with NBR seals* *with FPM seals*	from -20°C *(-4°F)* to 80°C *(176°F)* from -20°C *(-4°F)* to 100°C *(212°F)*	
Environmental temp. for working conditions		from -20°C *(-4°F)* to 50°C *(122°F)*	
Cavity		SAE 10/3Q	SAE 16/3Q
Weight		0.15 kg *(0.33 lb)*	0.45 kg *(0.99 lb)*

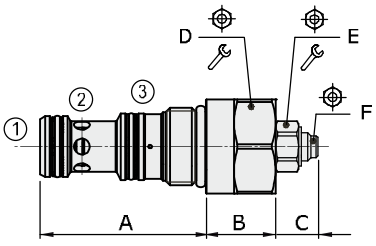
NOTE - For different conditions, please contact Walvoil Sales Dpt.



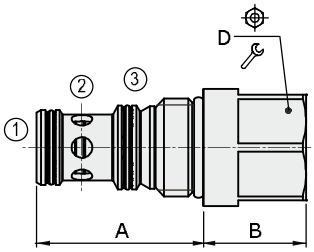
LA10QA/0...



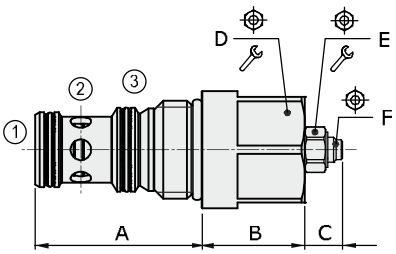
LA10QA/0R..



LA16QA/0...

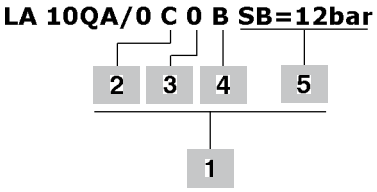


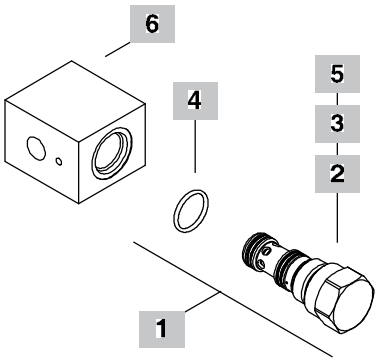
LA16QA/0R..



Valve type	A		B		C (max)		D			E			F
	mm	*in*	mm	*in*	mm	*in*		Nm	*lbft*		Nm	*lbft*	
LA10QA	47.6	*1.87*	20	*0.79*	21	*0.83*	27	70	*52*	13	9.8	*7.2*	3
LA16QA	35.1	*1.38*	56.9	*2.24*	24	*0.94*	36	100	*74*	13	9.8	*7.2*	3

Ordering codes and description composition





1 Cartridge

TYPE	CODE	DESCRIPTION
SAE cavity 10/3Q		
LA10QA/0C0B	0LA10Q002001	Fixed setting, 10 bar *(145 psi)*
LA10QA/0R0B SB=12bar	0LA10Q002002	Adjustable setting, std setting 12 bar *(174 psi)*
SAE cavity 16/3Q		
LA16QA/0C0B	0LA16Q002000	Fixed setting, 10 bar *(145 psi)*
LA16QA/0R0B SB=12bar	0LA16Q002001	Adjustable setting, std setting 12 bar *(174 psi)*

2 Stand by

Setting is referred to 1 l/min *(0.26 US gpm)* flow

TYPE	DESCRIPTION
A	Fixed setting: 1 bar *(14.5 psi)*
B	Fixed setting: 5 bar *(72.5 psi)*
C	Fixed setting: 10 bar *(145 psi)*
R	Adjustable setting: from 8 to 15 bar *(116 to 218 psi)*

3 Lead sealing

TYPE	DESCRIPTION
0	Without sealing
X	With sealing: for valves with adjustable stand-by only

4 Seals

TYPE	DESCRIPTION
B	**NBR (Buna)** o-ring seals, std configuration
V	**FPM (Viton)** o-ring seals, contact Sales Dept.

5 Stand-by setting

To be specified only with adjustable stand-by valve

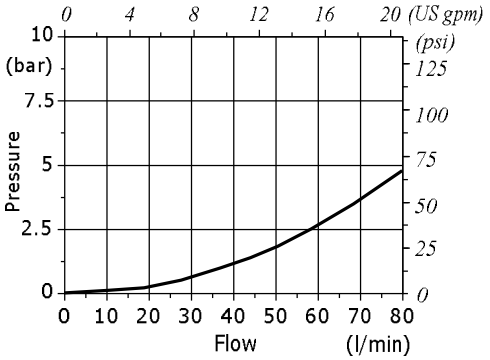
6 Valve body

TYPE	CODE	DESCRIPTION
SAE 10/3Q-G 1/2	3CC1032D21	Steel body for cavity 08 valve, G 1/2 standard thread
SAE 16/3Q-G 3/4	3CC1632E21	Steel body for cavity 16 valve, G 3/4 standard thread

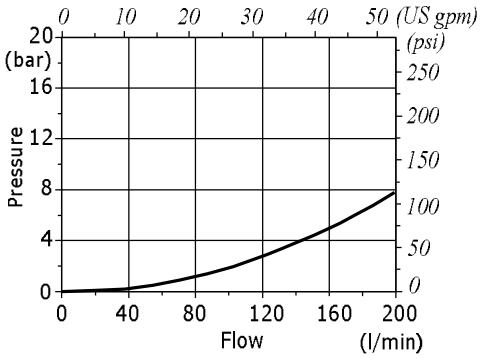
For aluminium bodies or different threading see from page 215

Rating diagrams

LA10QA pressure drop (fully open)



LA16QA pressure drop (fully open)



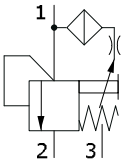
LB..QA type
logic element - 3 ways

- Vento to open configuration
- Fixed or adjustable Stand-by
- SAE10 and SAE16 cavities

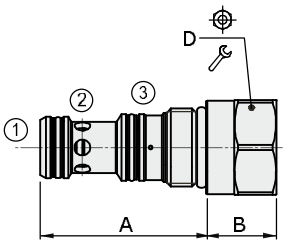
Technical specifications and diagrams are measured with mineral oil of 46 cSt viscosity at 40°C *(104°F)* temperature.

		LB10QA	LB16QA
Nominal flow		80 l/min *(21 US gpm)*	190 l/min *(50 US gpm)*
Max. pressure		350 bar *(5100 psi)*	
Opening pressure		1, 5, 10 bar - regolabile: da 8 a 15 bar	
Oil leakage	at 210 bar *(3050 psi)*	80 cm³/min *(4.88 in³/min)*	230 cm³/min *(14.03 in³/min)*
Fluid		mineral based oil	
Viscosity		10-200 cSt	
Max level of contamination		20/18/14 ISO4406	
Fluid temperature	*with NBR seals* *with FPM seals*	from -20°C *(-4°F)* to 80°C *(176°F)* from -20°C *(-4°F)* to 100°C *(212°F)*	
Environmental temp. for working conditions		from -20°C *(-4°F)* to 50°C *(122°F)*	
Cavity		SAE 10/3Q	SAE 16/3Q
Weight		0.15 kg *(0.33 lb)*	0.45 kg *(0.99 lb)*

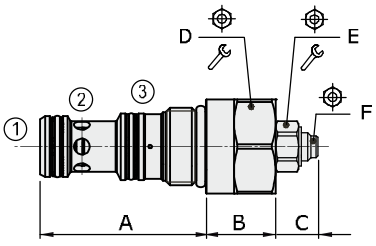
NOTE - For different conditions, please contact Walvoil Sales Dpt.



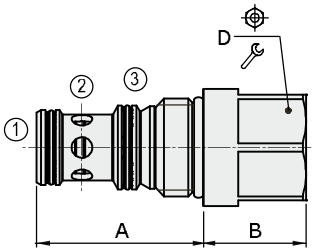
LB10QA/0...



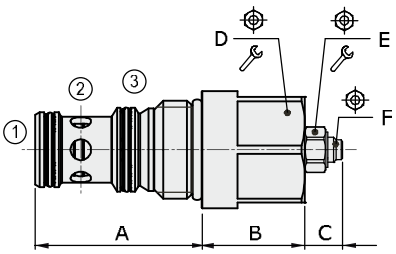
LB10QA/0R..



LB16QA/0...



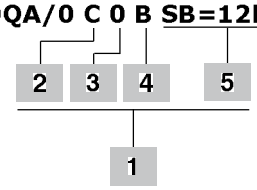
LB16QA/0R..

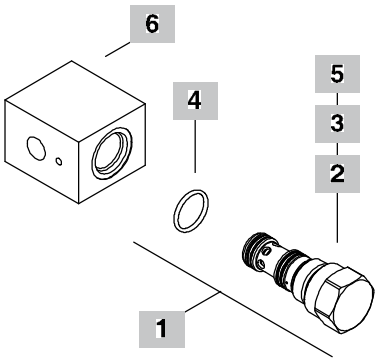


Valve type	A		B		C (max)		D			E			F
	mm	*in*	mm	*in*	mm	*in*		Nm	*lbft*		Nm	*lbft*	
LB10QA	47.6	*1.87*	20	*0.79*	21	*0.83*	27	70	*52*	13	9.8	*7.2*	3
LB16QA	35.1	*1.38*	56.9	*2.24*	24	*0.94*	36	100	*74*	13	9.8	*7.2*	3

Ordering codes and description composition

LB 10QA/0 C 0 B SB=12bar





1 Cartridge

TYPE	CODE	DESCRIPTION
SAE cavity 10/3Q		
LB10QA/0B0B	0LB10Q002000	Fixed setting, 5 bar *(72.5 psi)*
SAE cavity 16/3Q		
LB16QA/0B0B	0LB16Q002000	Fixed setting, 5 bar *(72.5 psi)*

2 Stand by

Setting is referred to 1 l/min *(0.26 US gpm)* flow

TYPE	DESCRIPTION
A	Fixed setting: 1 bar *(14.5 psi)*
B	Fixed setting: 5 bar *(72.5 psi)*
C	Fixed setting: 10 bar *(145 psi)*
R	Adjustable setting: from 8 to 15 bar *(116 to 218 psi)*

3 Lead sealing

TYPE	DESCRIPTION
0	Without sealing
X	With sealing: for valves with adjustable stand-by only

4 Seals

TYPE	DESCRIPTION
B	**NBR (Buna)** o-ring seals, std configuration
V	**FPM (Viton)** o-ring seals, contact Sales Dept.

5 Stand-by setting

To be specified only with adjustable stand-by valve

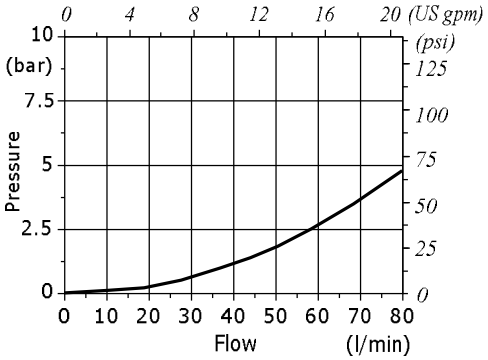
6 Valve body

TYPE	CODE	DESCRIPTION
SAE 10/3Q-G 1/2	3CC1032D21	Steel body for cavity 08 valve, G 1/2 standard thread
SAE 16/3Q-G 3/4	3CC1632E21	Steel body for cavity 16 valve, G 3/4 standard thread

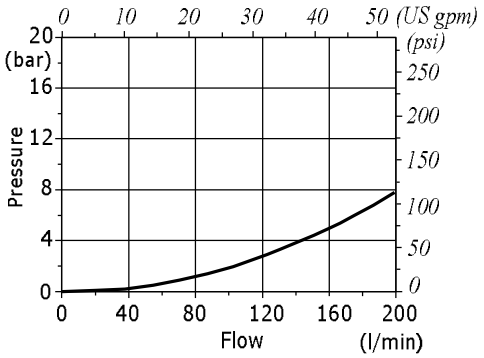
For aluminium bodies or different threading see from page 215

Rating diagrams

LB10QA pressure drop (fully open)



LB16QA pressure drop (fully open)



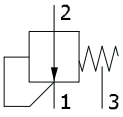
LC..QA type
logic element - 3 ways

- Vento to close configuration
- Fixed or adjustable Stand-by
- SAE10 and SAE16 cavities

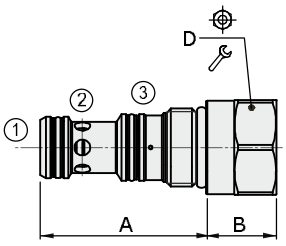
Technical specifications and diagrams are measured with mineral oil of 46 cSt viscosity at 40°C *(104°F)* temperature.

		LC10QA	LC16QA
Nominal flow		60 l/min *(16 US gpm)*	150 l/min *(39.6 US gpm)*
Max. pressure		350 bar *(5100 psi)*	
Opening pressure		1, 5, 10 bar - regolabile: da 8 a 15 bar	
Oil leakage	at 210 bar *(3050 psi)*	80 cm³/min *(4.88 in³/min)*	230 cm³/min *(14.03 in³/min)*
Fluid		mineral based oil	
Viscosity		10-200 cSt	
Max level of contamination		20/18/14 ISO4406	
Fluid temperature	*with NBR seals* *with FPM seals*	from -20°C *(-4°F)* to 80°C *(176°F)* from -20°C *(-4°F)* to 100°C *(212°F)*	
Environmental temp. for working conditions		from -20°C *(-4°F)* to 50°C *(122°F)*	
Cavity		SAE 10/3Q	SAE 16/3Q
Weight		0.15 kg *(0.33 lb)*	0.45 kg *(0.99 lb)*

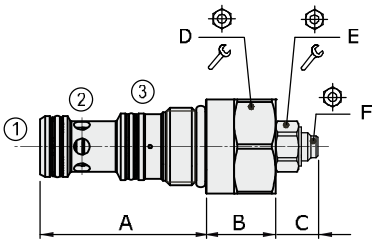
NOTE - For different conditions, please contact Walvoil Sales Dpt.



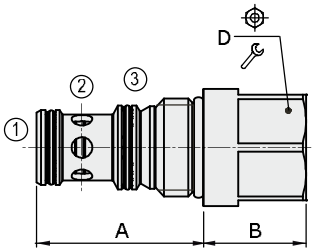
LC10QA/0...



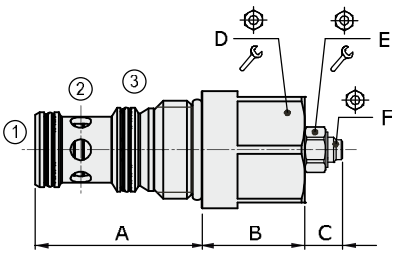
LC10QA/0R..



LC16QA/0...



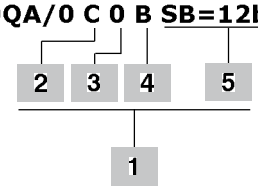
LC16QA/0R..

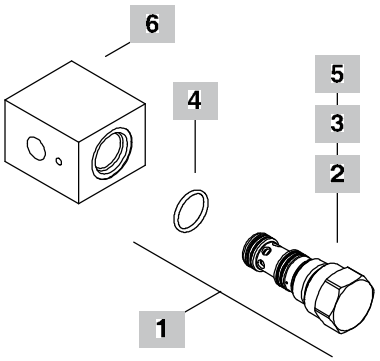


Valve type	A		B		C (max)		D			E			F
	mm	*in*	mm	*in*	mm	*in*		Nm	*lbft*		Nm	*lbft*	
LC10QA	47.6	*1.87*	20	*0.79*	21	*0.83*	27	70	*52*	13	9.8	*7.2*	3
LC16QA	35.1	*1.38*	56.9	*2.24*	24	*0.94*	36	100	*74*	13	9.8	*7.2*	3

Ordering codes and description composition

LC 10QA/0 C 0 B SB=12bar





1 Cartridge

TYPE	CODE	DESCRIPTION
SAE cavity 10/3Q		
LC10QA/0A0B	0LC10Q002000	Fixed setting, 1 bar *(14.5 psi)*
SAE cavity 16/3Q		
LC16QA/0A0B	0LC16Q002000	Fixed setting, 1 bar *(14.5 psi)*

2 Stand by

Setting is referred to 1 l/min *(0.26 US gpm)* flow

TYPE	DESCRIPTION
A	Fixed setting: 1 bar *(14.5 psi)*
B	Fixed setting: 5 bar *(72.5 psi)*
C	Fixed setting: 10 bar *(145 psi)*
R	Adjustable setting: from 8 to 15 bar *(116 to 218 psi)*

3 Lead sealing

TYPE	DESCRIPTION
0	Without sealing
X	With sealing: for valves with adjustable stand-by only

4 Seals

TYPE	DESCRIPTION
B	**NBR (Buna)** o-ring seals, std configuration
V	**FPM (Viton)** o-ring seals, contact Sales Dept.

5 Stand-by setting

To be specified only with adjustable stand-by valve

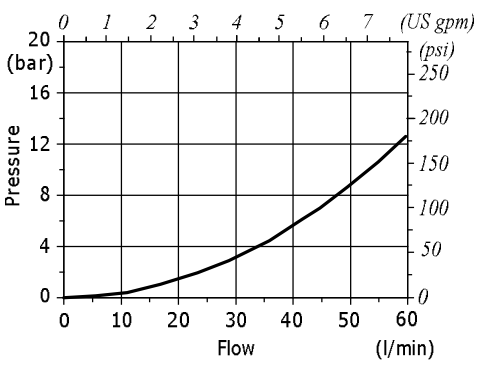
6 Valve body

TYPE	CODE	DESCRIPTION
SAE 10/3Q-G 1/2	3CC1032D21	Steel body for cavity 08 valve, G 1/2 standard thread
SAE 16/3Q-G 3/4	3CC1632E21	Steel body for cavity 16 valve, G 3/4 standard thread

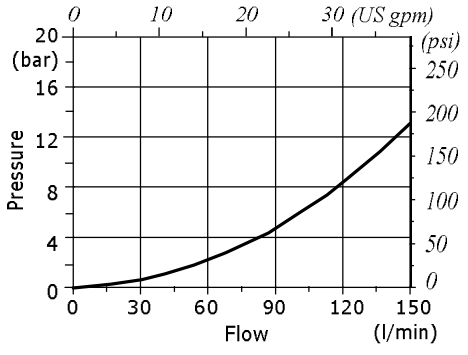
For aluminium bodies or different threading see from page 215

Rating diagrams

LC10QA pressure drop (fully open)



LC16QA pressure drop (fully open)



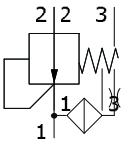
LD..QA type
logic element - 3 ways

- Pilot to open configurationj
- Fixed or adjustable Stand-by
- SAE10 and SAE16 cavities

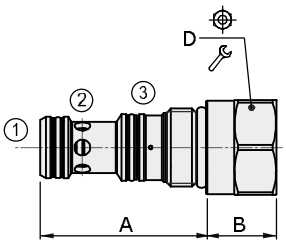
Technical specifications and diagrams are measured with mineral oil of 46 cSt viscosity at 40°C *(104°F)* temperature.

		LD10QA	LD16QA
Nominal flow		60 l/min *(16 US gpm)*	150 l/min *(39.6 US gpm)*
Max. pressure		350 bar *(5100 psi)*	
Opening pressure		1, 5, 10 bar - regolabile: da 8 a 15 bar	
Oil leakage	at 210 bar *(3050 psi)*	80 cm³/min *(4.88 in³/min)*	230 cm³/min *(14.03 in³/min)*
Fluid		mineral based oil	
Viscosity		10-200 cSt	
Max level of contamination		20/18/14 ISO4406	
Fluid temperature	*with NBR seals* *with FPM seals*	from -20°C *(-4°F)* to 80°C *(176°F)* from -20°C *(-4°F)* to 100°C *(212°F)*	
Environmental temp. for working conditions		from -20°C *(-4°F)* to 50°C *(122°F)*	
Cavity		SAE 10/3Q	SAE 16/3Q
Weight		0.15 kg *(0.33 lb)*	0.45 kg *(0.99 lb)*

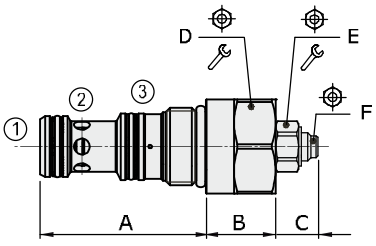
NOTE - For different conditions, please contact Walvoil Sales Dpt.



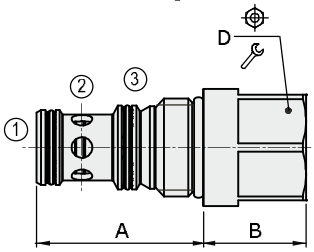
LD10QA/0...



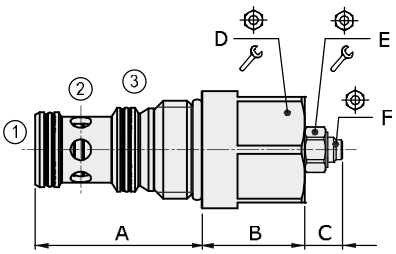
LD10QA/0R..



LD16QA/0...



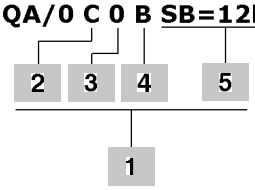
LD16QA/0R..

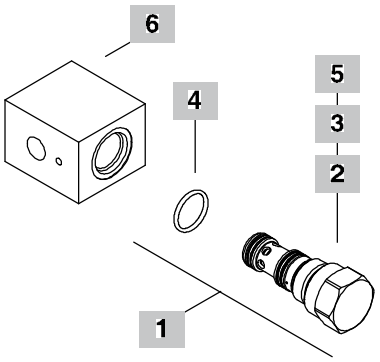


Valve type	A		B		C (max)		D			E			F
	mm	*in*	mm	*in*	mm	*in*		Nm	*lbft*		Nm	*lbft*	
LD10QA	47.6	*1.87*	20	*0.79*	21	*0.83*	27	70	*52*	13	9.8	*7.2*	3
LD16QA	35.1	*1.38*	56.9	*2.24*	24	*0.94*	36	100	*74*	13	9.8	*7.2*	3

Ordering codes and description composition

LD 10QA/0 C 0 B SB=12bar





1 Cartridge

TYPE	CODE	DESCRIPTION
SAE cavity 10/3Q		
LD10QA/0A0B	0LD10Q002000	Fixed setting, 5 bar *(72.5 psi)*
SAE cavity 16/3Q		
LD16QA/0A0B	0LD16Q002000	Fixed setting, 5 bar *(72.5 psi)*

2 Stand by

Setting is referred to 1 l/min *(0.26 US gpm)* flow

TYPE	DESCRIPTION
A	Fixed setting: 1 bar *(14.5 psi)*
B	Fixed setting: 5 bar *(72.5 psi)*
C	Fixed setting: 10 bar *(145 psi)*
R	Adjustable setting: from 8 to 15 bar *(116 to 218 psi)*

3 Lead sealing

TYPE	DESCRIPTION
0	Without sealing
X	With sealing: for valves with adjustable stand-by only

4 Seals

TYPE	DESCRIPTION
B	**NBR (Buna)** o-ring seals, std configuration
V	**FPM (Viton)** o-ring seals, contact Sales Dept.

5 Stand-by setting

To be specified only with adjustable stand-by valve

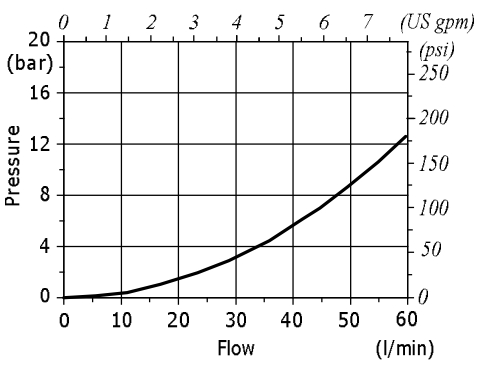
6 Valve body

TYPE	CODE	DESCRIPTION
SAE 10/3Q-G 1/2	3CC1032D21	Steel body for cavity 08 valve, G 1/2 standard thread
SAE 16/3Q-G 3/4	3CC1632E21	Steel body for cavity 16 valve, G 3/4 standard thread

For aluminium bodies or different threading see from page 199

Rating diagrams

LD10QA pressure drop (fully open)



LD16QA pressure drop (fully open)